A review of biodiversity legislation in NSW

Final Report

Independent Biodiversity Legislation Review Panel

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18 December 2014

Table of contents

Foreword

The Independent Biodiversity Legislation Review Panel (the panel) has attempted to portray a positive new approach to the very important goal of more effective conservation of the biodiversity of NSW. This vision has been based on a detailed review of the achievements and deficiencies of the past 40 to 50 years in NSW, and observations on other Australian and international jurisdictions.

Ultimately our goal must be to minimise future losses of native biodiversity. While there is a delay between habitat degradation and extinctions, by aiming to conserve habitats in good condition, we ***can*** reduce the rate of biodiversity loss. We believe that this can be done at the same time as reducing regulation and improving social and economic outcomes.

We are not aware of anywhere in the world where long-term conservation of historical, cultural or biophysical resources has been successfully achieved solely through exerting the coercive powers of government. Educational, suasive and incentive measures are invariably an important part of successful regimes – we believe that these mechanisms should be used more in NSW. Without such measures, there is a strong probability of perverse outcomes.

While the regulatory framework is important of course, effective conservation relies on the cooperation of landholders and fortunately, this is often given willingly. The success of 'Incentive PVPs' in the two areas where they have been widely applied (Riverina and the Hunter) indicates what is possible, as does the widespread enthusiasm for voluntary measures like the Great Eastern Ranges initiative. Conversely, too much 'red tape' alienates the very people whose cooperation is essential for great biodiversity outcomes. As a general rule, we argue that regulation should be outcomes focused, risk-based and proportionate to the potential impacts and consequences of the regulated activity. This has not always been the case for the management of biodiversity (vegetation and wildlife) in NSW.

This report:

- **Proposes** a new 'Biodiversity Conservation Act', with the goal to maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development.

- **Recommends** focusing on conserving biodiversity at a bioregional or state scale.
- **Proposes** a vision of landscape scale conservation and productivity through a connected network of public and private land which meets national and international obligations – and is in line with international best practice – and is feasible, achievable and affordable.
- **Recommends** repealing the *Native Vegetation Act 2003*. The Act has not met expectations as a central pillar of biodiversity conservation in NSW. It has been contentious because of difficulties in implementation and the inequitable distribution of the costs involved, in particular sectors and in particular regions of the state.
- **Recommends** repealing the *Threatened Species Conservation Act 1995* and parts of the *National Parks and Wildlife Act 1974 Act* and reconstituting elements of them in a new 'Biodiversity Conservation Act'.
- **Recommends** that management of native vegetation in the context of **existing** agricultural management would be assisted and supervised by Local Land Services, while **new** agricultural developments which would impact on native vegetation would require consent from the appropriate authorities (often Local Government), as occurs for any other change in land use.
- **Capitalises** on opportunities to not only identify areas of high-conservation value outside of the public reserve system but also promote private land conservation and provide funding their long-term on-going management.
- **Encourages** the broader and deeper application of offsetting, as approved in the NSW Biodiversity Offsetting Policy for Major Projects and through mechanisms such as biodiversity certification and BioBanking. A statewide biodiversity offsets fund should be operational as soon as possible.
- **Modernises** and streamlines the regulation of human-wildlife interactions, particularly in recognition of the increasing popularity of keeping native animals (especially birds and reptiles) as pets, while maintaining the general provisions restricting harm to, or trade in, native wildlife.
- **Recommends** the development and use of a comprehensive system for monitoring and reporting the condition (extent and quality) of biodiversity in NSW.

In keeping with our Terms of Reference, we have not dealt with the threatened species provisions of the *Fisheries Management Act 1994*. The Government may wish to consider if the recommendations in this report could be applied to those provisions.

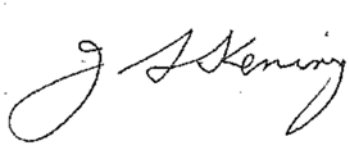
This list of recommendations may seem a long and complicated reform agenda, but the panel is convinced that all the elements in the package of measures are necessary to achieve the objectives that the panel was tasked to pursue:

- better environmental outcomes (and better monitoring and documentation of progress)
- reduced compliance burden and greater potential productivity gains for regulated parties
- minimal increase in program delivery and administration costs to NSW taxpayers (but some reallocation of effort).

The panel gratefully acknowledges the contribution and hard work of our Secretariat within the Office of Environment and Heritage (OEH), the advice and assistance of senior officers of other relevant government agencies, the many people we met on field visits to the Monaro, Central West, the Hunter and the Northwest including Local Land Services officers, local government officials and staff, members of non-government organisations, Aboriginal experts, employees of mining companies, academics and of course, farmers. The public has made an invaluable contribution through the 395 written submissions documenting their experiences and insights about the way the existing system for protecting biodiversity operates, its strengths and its weaknesses. Without all this input and assistance, our task would have been much more difficult to complete in the allotted timeframe.

Dr Neil Byron (Chair)

Dr Wendy Craik AM



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18 December 2014

1. A clear case for reform

This is the panel's final report on the review of biodiversity legislation in NSW.

In the terms of reference for the review[1], the Minister for the Environment, the Hon. Rob Stokes MP, asked the panel to undertake a review of the *Native Vegetation Act 2003*, *Threatened Species Conservation Act 1995* and *Nature Conservation Trust Act 2001*, and parts of the *National Parks and Wildlife Act 1974*.[2]

The aims of the review were to recommend a simpler, streamlined and more effective legislation which improves the conservation of biodiversity and supports sustainable development thereby reducing the compliance and administrative burdens.

In preparing this report the panel drew on a wide range of experience and expertise, including local knowledge obtained through regional site visits and meetings with community and environmental groups, farmers, industry and government bodies.[3] The panel considered six comprehensive background papers evaluating the current policy and legislative framework, providing available evidence about the state of biodiversity conservation in NSW and outlining some of the strengths and weaknesses of the current legislation.[4] The panel also considered reports commissioned from the Environment Liaison Office (ELO 2014) and NSW Farmers (Evidentiary 2014), submissions analysis (OEH 2014a) and issues raised in written submissions.[5]

'The protection of biodiversity is important in its own right; however, it is also fundamental for maintaining healthy ecosystem services and, subsequently, our way of life.'

Environment Liaison Office

'We maintain that urgent legislative change is required to refocus the native vegetation framework into something that farmers can work with and which does not jeopardise the future of environmental values and in turn a vibrant agricultural industry'.

NSW Farmers

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[1] The terms of reference are available on OEH's website at <http://www.environment.nsw.gov.au/biodiversitylegislation/BLRevTerms.htm>.

[2] While the panel recognises that marine and aquatic impacts and fisheries are ecologically connected and significant, consideration of these issues was beyond the scope of the terms of reference for the review.

[3] The review process is outlined on OEH's website at <http://www.environment.nsw.gov.au/BiodiversityLegislation/BLRevProcess.htm>.

[4] Background papers are available on the OEH website, at < insert link>.

[5] Commissioned reports, a submissions report and individual submissions can be found on OEH's website at <http://www.environment.nsw.gov.au/biodiversitylegislation/BLRevSubmissions.htm>.

The panel found that the data, information and knowledge needed to evaluate the effectiveness of the legislative framework and supporting mechanisms is poor. There is a broad understanding of which plants and animals are most threatened and the key threats to biodiversity, but the level of understanding of the outcomes of regulatory responses or conservation action is low. This is a critical gap that needs to be addressed in the recommended reforms (see section 7).

1.1 Biodiversity outcomes

Having considered available evidence, the panel has found that the community expects that biodiversity[6] and the ecosystem services[7] it provides are valued, conserved and sustainably managed and used. Over time, governments have responded to these expectations through regulation, establishment of a reserve system on public and private land, investment in biodiversity conservation programs, community engagement, and education and extension activities. To the extent that it can be assessed, the effectiveness of these efforts has been mixed.

The NSW landscape is not in a pristine condition. Biodiversity has been modified and is constantly changing in response to pressures, and in particular, human-induced change. The major threats to biodiversity include clearing and disturbance of native vegetation, the impacts of invasive pest and weed species, altered fire regimes since European settlement and climate change (NSW EPA 2012 & Coutts-Smith & Downey 2006).

The NSW Environment Protection Authority (2012) concluded in its *State of Environment 2012* report that the levels of vegetation clearing for agriculture and infrastructure have stabilised at approximately 23,400 hectares per annum and the overall extent of woody vegetation is also stable. However, there is no comprehensive evidence about the current condition (quality and extent) of native vegetation in NSW and the community is not able to understand whether the current native vegetation laws have been effective. Some stakeholders, such as Dr Phil Gibbons, who provided a briefing to the panel, state that the *Native Vegetation Act 2003* has resulted in no change to historic rates of land clearing. Others, such as the ELO (2014) and EDO (2014) state that these legislative changes have been successful in reducing broadscale clearing.

The evidence suggests that the condition of most native vegetation in NSW has deteriorated (NSW EPA 2012). Sixty-one percent of NSW is covered by native vegetation; nine percent of the State is considered to be close to its original condition and the remaining 52 percent has been modified(Dillon, McNellie & Oliver 2011). The long-term effects of fragmentation following

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[6] **Biodiversity** refers to the wide variety of ecosystems and living organisms: animals and plants (including threatened species), their habitats (including native vegetation) and their genes. It is defined as the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems. For more information see the IUCN website at <http://www.iucn.org/iyb/about/>.

[7] An **ecosystem service** is defined as a service people obtain from the environment. Ecosystem services are the transformation of natural assets (soil, plants and animals, air and water) into things that we value. They can be viewed as provisioning such as food and water; regulating, for example, flood and disease control; cultural such as spiritual, recreational, and cultural benefits; or supporting, like nutrient cycling that maintain the conditions for life on Earth. For more information see the IUCN website at <http://www.iucn.org/iyb/about/>.

clearing, combined with increasing pressures from invasive species and climate change mean the pressures on condition are likely to remain for some time (NSW EPA 2012). However, an increase in restoration activities could improve native vegetation condition in the future.

The network of public and private land under conservation has grown significantly in recent years. As at June 2014, the NSW public land reserve system covered almost 7.1 million hectares or 8.85 percent of the state. This has increased from 5.3 million hectares since 2000 (OEH 2014b). As more than 90 percent of the land in NSW lies outside the public reserve system, private land conservation plays an essential role in conserving biodiversity at the state scale. Increased conservation on private land has led to around 3.1 million hectares or about 3.9 percent of NSW being conserved under various conservation programs (as at end September 2014). The majority of private land under conservation in NSW is not conserved in-perpetuity (OEH 2014c). Further information on areas protected by private land conservation in NSW is provided in Section 5.

Despite these efforts, overall biodiversity loss continues. Fifty-nine percent of all native mammals in NSW are now listed as threatened with extinction, along with 34 percent of amphibians, 30 percent of birds and 14 percent of native plants (OEH 2014b, NSW Scientific Committee 2014).[8] Further species losses are also expected because of an 'extinction debt', the time lag between habitat loss and species extinction (Szabo et al 2011) and the threats from invasive species (Coutts-Smith & Downey 2006). The panel notes that there is a lack of comprehensive information about the status of biodiversity in NSW and the extent to which conservation on public and private lands is contributing to better biodiversity outcomes.

Widespread invasive species—including foxes, feral cats, wild dogs, rabbits, goats, and weeds—have been identified as a threat to more than 70 percent of the state's threatened species (Coutts-Smith & Downey 2006). In particular, feral cats, red foxes and wild dogs are the main predators threatening fauna (Coutts-Smith et al 2007). These threats are difficult to control as they are widespread and expensive to manage (Coutts-Smith & Downey 2006, Coutts-Smith et al 2007).

Growing pressures from increased population and increasing levels of economic activity will continue to drive demand on our landscapes for food, fibre, minerals, energy, residential development, recreation; as well as for conservation of aesthetic, cultural and biodiversity values. To address these challenges, reform of the existing legislative system and associated implementation mechanisms is required to stabilise the loss of biodiversity, while at the same time facilitating sustainable development.

[8] See OEH 2014b for more information on status and trends of biodiversity in NSW.

1.2 Current system

The current suite of biodiversity laws and particularly more recent programs or reforms have the potential to deliver some positive outcomes:

- proactive investment in private land conservation, including the establishment of corridors such as the Great Eastern Ranges initiative
- a contemporary approach to the planning and implementation of threatened species conservation through the Saving our Species program
- more standardised, transparent and flexible methods for managing biodiversity in land use planning and development approval processes (such as biodiversity certification and the new Biodiversity Offsets Policy for Major Projects).

However, inconsistencies between the aging statutory framework and contemporary government policy directions are creating uncertainty for the regulated community, and impeding efficient and effective decision-making. The current laws create a complex system that is difficult for the community to navigate, has imposed unnecessary regulatory burdens, especially in certain regions and sectors across the state, is process driven and not fulfilling current objectives in the most effective and efficient way. In particular, how governments regulate clearing of native vegetation on private land has been the subject of continued debate since the 1980s (Bombell & Montoya 2014) and the current law is strongly opposed by the regulated farming community (submission 347).

The current system does not take into account social and economic considerations when determining whether clearing of native vegetation may be carried out for agricultural development. The laws apply standards and mechanisms inconsistently across sectors, with agricultural development treated differently under the *Native Vegetation Act 2003* to other forms of development such as mining, urban development and infrastructure. In general, decision making in urban areas takes into consideration social and economic factors, whereas rural landholders are subject to stricter rules that require environmental outcomes to be improved or maintained at a site scale (Farrier, Kelly & Langdon 2007). This differential treatment is viewed by many rural landholders as 'creating inequalities and double standards' (Evidentiary 2014, p.3) and is potentially preventing sustainable agricultural development from occurring in some highly productive parts of NSW (submission 347, 352, & Evidentiary 2014).

Almost two decades of changes to the native vegetation laws have resulted in a cumbersome and over-regulated system that is process driven. The panel has heard that the farming community strongly feels that the *Native Vegetation Act 2003* is preventing them from getting on with the business of farming (submissions 85, 272 & 347). The Act overregulates ongoing farm management practices, such as managing invasive native species, native grasslands and construction of on-farm infrastructure, and is creating an unnecessary barrier to innovation, sustainable agricultural production and efficient land management.

The regulatory system for managing native vegetation has led to some significant perverse outcomes. For example, the current way in which the *Native Vegetation Act 2003* is

administered does not adequately support rotational farming and management of native grasses and seasonal practices. Landholders also maintain that the current arrangements are not sufficiently flexible to deal with clearing isolated paddock trees, which inhibits innovative agricultural techniques and farm productivity (submission 347 & Evidentiary 2014). Local Land Services staff and rural landholders are seeking an outcomes-based approach that provides flexibility in appropriate circumstances to allow innovation and/or take into account regional factors (Evidentiary 2014). Perverse outcomes could be addressed and better environmental and productivity outcomes achieved if more flexibility was provided.

The native vegetation laws are based on a 'command and control' approach to regulation and there is clear evidence that this approach has resulted in mistrust between the farming community and the government (Bartel 2014 & Evidentiary 2014). Bartel (2014) found that this approach has led to resistance and non-compliance amongst some landholders. Many felt 'unfairly persecuted' (Evidentiary 2014, p. 10) and felt the system assumes all farmers are doing the wrong thing (Bartel 2013 & Evidentiary 2014). Rebuilding this trust will be critical to developing a workable system, especially one which entails collaborative partnerships between the community and government.

Delays in processing and complicated administrative procedures have been a constant feature in the debate surrounding regulation of native vegetation clearing (Bombell & Montoya 2014) and raised as a criticism in the NSW Audit Office report (2002). While Evidentiary (2014, p. 4) found that the majority of landholders interviewed were satisfied or neutral with the process of obtaining a Property Vegetation Plan, there was a perception by those landholders who had not applied for a Property Vegetation Plan that it was 'an ordeal' and 'not worth the effort'. Data as at 2012 indicates that average waiting times for a Local Land Services officer to first visit the property as part of the process was on average 13 weeks and in the case of one Local Land Service 80 weeks (OEH 2014d). The panel understands that in the Central West Local Land Service it is not uncommon for the Property Vegetation Plan process to take up to 48 months.

The perception that the process for assessment is a 'black box' was evident in this review and in past reviews (Lane 2013). The scientific and technical nature of the Environmental Outcomes Assessment Methodology that underpins the assessment process for Property Vegetation Plans is difficult for many members of the community to comprehend.

The panel notes the frustration among landholders that the *Native Vegetation Act 2003* places the burden of retaining native vegetation on just a relatively small number of landholders. This has been a constant theme of parliamentary debates on native vegetation clearing controls since 1950 (Bombell and Montoya 2014) and cited in numerous reviews on native vegetation (Davidson et al 2006, the Senate, Finance and Public Administration References Committee 2010, Productivity Commission 2004).

In contrast, many environment groups believe that the *Native Vegetation Act 2003* is working well, citing evidence that over four million hectares of native vegetation is protected or under improved management and more than 950 Property Vegetation Plans are in place. They call for strengthening of biodiversity laws to address continuing loss of biodiversity and seek to apply the

'improve or maintain' environmental outcomes standard to all development (ELO 2014 & submissions 48, 155, 333 & 379).

Other environment groups suggest the current laws contain a vast number of regulatory tools and they find the failure to achieve legislative objectives is largely due to lack of resourcing and coordination for implementation, rather than inadequate legislation (EDO 2014).

Outside the agricultural sector, urban developers, planners and the mining sector advocate for the new biodiversity legislation to be well integrated with the planning system. In particular, these submissions have highlighted the need to avoid duplication of effort and provide more upfront certainty (submissions 40, 45 & 334).

Many people are interested in biodiversity conservation and their efforts are critical to maintaining healthy, functioning and productive landscapes across NSW. A focus on threatened species protection and recovery needs to be complemented by broader landscape scale improvement and management of threats. There is a need to improve incentives for conservation action on private land, simplify current programs and remove barriers to participation (submissions 45, 49 and 324).

There is limited information readily accessible to enable government and the community to better understand the extent of the problem or how to improve biodiversity management, despite ecological monitoring generally being considered an essential tool for the effective management of biodiversity (Possingham et al 2012). Even though data is collected by many people and organisations it is not always shared or fully utilised to guide decision making (submissions 40 and 46 & ELO 2014).

Years of incremental legislative change has resulted in a regulatory framework that is outdated and lagging behind best practice biodiversity conservation law, where an outcomes and risk-based approach to regulation is the standard (Sparrow 2000). Provisions relating to managing human and wildlife interactions for example remain largely unchanged since their introduction 40 years ago.

Emerging trends in biodiversity conservation are shifting from a focus on protecting specific assets or threatened species towards supporting healthy, functional landscapes that provide a range of goods and services (European Commission 2011, World Wildlife Fund 2014 and Watson et al 2011).

A complete overhaul of existing legislation, together with supporting programs, policies, stakeholder engagement and support, is necessary to address these challenges and achieve the Government's objectives.

1.3 A new system

Having considered all of the information, insights and ideas provided to the panel during the review, and weighing up the often opposing views of stakeholders, the panel has concluded that fundamental and transformative reform is required to meet the aims of this review to facilitate conservation of biodiversity and support sustainable development. The panel believes that

improving biodiversity outcomes and facilitating sustainable development are not mutually exclusive. These goals can be achieved if the Government adopts the reforms recommended in this report as an integrated package.

The recommended reforms would provide greater levels of flexibility to industry and landholders on how they manage biodiversity, including native vegetation. This will in turn lead to improved productivity, investment and certainty for industry and the farming community.

The panel has concluded that the *Native Vegetation Act 2003* should be repealed and new arrangements established in its place. The Act imposes an unnecessary 'improve or maintain' standard at the site scale and attempts to regulate two different things – land management and new agricultural development – through the one system that was intended to be simple but has become complicated and onerous. The panel proposes that ongoing agricultural land management should be managed regionally by the Local Land Services and the regulation of new agricultural development should be integrated into the mainstream planning system. This would remove the one-dimensional 'improve or maintain' environmental outcome standard applying at a site scale for agricultural activities.

The panel acknowledges that by removing the 'improve or maintain' environmental outcome standard there could be some losses of biodiversity at a site scale. To counter this, the Government will need to increase public investment in biodiversity conservation on private land (including, where feasible, restoration and rehabilitation activities in areas of the state that are extensively cleared or degraded), facilitate off-site biodiversity offsetting, support the development and management of a comprehensive network of biodiversity corridors, and ensure the Saving our Species program is adequately resourced. If this is done properly, including programs to harness community goodwill and effort, the Government can achieve a goal of conserving biodiversity at a bioregional[9] and state scale while at the same time facilitating sustainable development.

The panel recommends that decisions on all development, including agricultural development, should be based on a balanced and transparent appraisal of environmental, social and economic factors. This can be achieved by moving the regulation of agricultural development into the mainstream planning system.

The panel recommends that all development should be required to determine how biodiversity impacts should be avoided, minimised and/or offset in accordance with a single, transparent and peer-reviewed method for biodiversity assessment. The biodiversity offsetting scheme should be expanded to all development to achieve this and to drive a positive market for landholders to opt into stewardship contracts.

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[9] **Bioregional** refers to the IBRA (Interim Biogeographic Regionalisation for Australia) regions that are based on the national and regional planning framework for the systematic development of a comprehensive, adequate and representative ('CAR') National Reserve System, at <http://www.environment.gov.au/topics/land/national-reserve-system/science-maps-and-data/australias-bioregions-ibra >. There are 18 bioregions in NSW.

The panel recommends that agricultural land management activities which generally present very low risks to biodiversity, be allowed to be carried out without the need for formal approval. The panel recommends that the Government should make codes of practice, in consultation with the community, to guide land management activities that can cause potential environmental impacts.

The panel recommends that a risk-based approach be taken to regulation that emphasises education and voluntary compliance while still giving regulators the tools to take strong enforcement action against those who do the wrong thing.

The panel also proposes a series of reforms to drive better conservation action. The legislative mechanisms to facilitate private land conservation can be simplified and strengthened, and delivery can be outsourced to a program manager. The legislative provisions can also be modernised to support the Saving our Species program, which is designed to prioritise cost-effective action.

To ensure positive biodiversity gains at bioregional and state scales over time, the Government will need to invest adequately in positive conservation action. The panel recommends that the Government consider supplementing market-driven private land conservation activity with direct Government investment in positive conservation effort; encouraging involvement of Local Land Services, and philanthropic and community effort through bodies such as Landcare, Bush Regenerators and the Great Eastern Ranges initiative; and increased investment in the Saving our Species program.

The panel recommends a more strategic and integrated approach to guide biodiversity conservation efforts on private land will provide for better connectivity and result in stronger and more effectively focused biodiversity outcomes. All land conservation providers should work towards a single spatially expressed vision for a network of private and public land conservation in the future.

The panel recommends that the Government draft a new 'Biodiversity Conservation Act' with an overarching objective 'to maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development'. Legislative objects to support this objective are also proposed in this report.

The panel also makes a series of recommendations on improving the processes for listing threatened species and ecological communities, developing a robust monitoring, evaluation and reporting framework, and risk-based regulation of human interactions with wildlife.

The following sections provide more detail on the panel's findings and recommendations.

2. Reform recommendations

Throughout this report, the panel has made 43 recommendations for reform organised under six themes that cut across the biodiversity legislation in NSW. The recommendations are summarised here.

Conservation in development and land management

The panel considers that decision-making processes for all forms of development, including agricultural development should be based on a balanced and transparent appraisal of the environmental, social and economic impacts of the proposed development. Agricultural development (i.e. land use change) should be managed in the same way as all other forms of development.

The panel recommends that the NSW Government should:

1. **Level the playing field for agricultural development and land management activities** by:

(a) repealing the *Native Vegetation Act 2003*

(b) removing the 'improve or maintain' standard for clearing of native vegetation at a site scale

(c) taking a risk-based approach to managing the biodiversity impacts of modifying native vegetation during agricultural land management activities by incorporating legislative arrangements for agricultural land management activities into *the Local Land Services Act 2013*

(d) treating all forms of development in a consistent and fair way, by integrating the assessment and approval of all forms of agricultural development that involve clearing of native vegetation into the *Environmental Planning and Assessment Act 1979*

(e) using private land conservation mechanisms to protect and manage the biodiversity values of areas in cases where a development application is refused because the vegetation proposed to be cleared is of very high-conservation value.

2. **Support landholders and promote best practice for agricultural land management activities** by:

(a) developing best practice guidelines for low-risk (and therefore exempt) land management activities where required

(b) developing new enforceable codes of practice for those management activities that can have environmental impacts

(c) providing landholders with the option of obtaining a certificate from Local Land Services to confirm that proposed clearing is compliant with a code of practice

(d) developing guidelines and codes of practice for agricultural land management activities that reflect regional differences in landscapes and agricultural land management practices

(e) developing an on-line system for landholders to notify Local Land Services before clearing under a relevant code of practice.

3. **Ensure that, where agricultural land management activities can have environmental impacts, such impacts are appropriately managed** by providing for the Minister administering the proposed new 'Biodiversity Conservation Act' to have a concurrence role in the making of the codes of practice, as well as any decisions about new categories of exempt land management activities.

4. **Amend Local Environmental Plans to provide landholders with certainty** about which types of agricultural development that includes native vegetation clearing would require development consent under the *Environmental Planning and Assessment Act 1979* and use maps to identify areas of land (based on mapped vegetation and previous land use) for which development does or does not require development consent to permit clearing.

5. **Provide OEH with adequate resources to ensure the maps are developed and ready to use** before the new arrangements for agricultural development commence, to ensure the maps will be updated annually and for reviews requested by landholders to be processed efficiently.

6. **Set requirements for agricultural development approved under the Environmental Planning and Assessment Act 1979 that are proportionate to the scale and intensity of the proposed development and associated land clearing** (including categories of exempt development and State Significant Development).

7. **Review regulatory arrangements for timber harvesting on private land as part of a separate process** that:

(a) does not regulate the harvesting of native timber on private land as a form of land use change

(b) considers options for regulating sustainable forestry operations based on their scale and intensity rather than tenure, including options for permitting low-intensity operations on private land without the need for approval and a focus on outcomes rather than process

(c) considers a range of options for improving the environmental performance of haulage and harvest contractors operating on private and public land, including licensing and minimum standards.

8. **Adopt a risk-based approach to licensing threatened species 'harm'** to:

(a) exempt very low-risk activities from the need to apply for a licence

(b) permit low-risk activities to be carried out under an enforceable code of practice

(c) require a licence application for all other activities that are not low risk, that is assessed against publicly available guidelines.

9. **Ensure adequate funding and develop capacity building programs** to ensure Local Land Services and councils have the appropriate skills and adequate resources to implement the proposed model.

10. **Maximise the use of accredited third parties** to assess the biodiversity impacts of development applications made under the *Environmental Planning and Assessment Act 1979*.

11. **Take a risk-based approach to regulation** that emphasises education and voluntary compliance while still giving regulators the tools to take enforcement action against those who do the wrong thing, in a way that is commensurate with the seriousness of an offence.

12. **Adopt a single, scientifically-based, transparent, publicly-available and independently reviewed method** for assessing the biodiversity and other environmental impacts of all development in NSW.

13. **Expand the Biodiversity Offsets Policy for Major Projects** to:

(a) create a consistent approach to avoiding, minimising and offsetting biodiversity impacts for all types of development

(b) drive a positive market for landholders to opt in to long-term stewardship contracts to supply environmental services.

14. **Expand the biodiversity offsets fund** so it applies to all types of development, including the delivery of offsets required under multi-site assessments, such as biodiversity certification.

See **Section 3** for more information.

Conservation in land use planning

The panel supports use of biodiversity certification where the benefits it provides—of removing the need for individual site-based threatened species assessments at the development assessment stage—outweigh the costs of strategic upfront assessment.

The panel recommends that the NSW Government should:

15. **Ensure that biodiversity objectives and priorities,** including priorities identified in a statewide framework or strategy for conservation or in plans prepared by Local Land Services —are:

(a) reflected in any new state planning policies prepared under the Environmental Planning and Assessment Act 1979

(b) incorporated in Regional Growth and Infrastructure Plans and Subregional Delivery Plans, instead of in separate Regional Conservation Plans.

16. **Identify candidate areas for biodiversity certification** in Regional Growth and Infrastructure Plans and Subregional Delivery Plans.

17. **Where efficient, ensure that biodiversity certification** is able to be applied to:

(a) all forms of development in both urban and rural contexts

(b) planning proposals for spot rezonings and changes to minimum lot sizes for subdivisions.

18. **Investigate options for providing financial support to planning authorities to help fund biodiversity certification and explore cost recovery options** to recoup costs at the development assessment stage.

19. **Provide a mechanism for proponents to make a monetary contribution to secure offsets** (e.g. developer contributions) and allow these funds to be deposited into a single offsets fund (see Recommendation 14).

20. **Seek a strategic assessment (or bilateral agreement accreditation) of the NSW biodiversity certification process under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999***.

See **Section 4** for more information.

Conservation action

Conservation on private land complements the formal protected reserve system on public lands. Strengthening the effectiveness of private land conservation provisions in the proposed legislation and strategic investment could encourage greater participation by landholders to achieve better outcomes for biodiversity across the state.

The panel recommends that the NSW Government should:

21. **Consolidate the mechanisms for biodiversity conservation on private land** into a three-tiered system that provides proportionate incentives to landholders: biodiversity offsetting agreements, voluntary conservation agreements and wildlife refuges.

22. **Outsource the administration of all private land conservation mechanisms** to a third party program manager for private land conservation and reconstitute the Nature Conservation Trust to perform this role initially, established under either the NSW *State Owned Corporations Act 1989* or the Commonwealth *Corporations Act 2001*.

23. **In consultation with local communities and government agencies including Local Land Services, develop a statutory statewide prioritisation mechanism that establishes a single spatially expressed vision for a network of private and public land conservation** to:

(a) map all areas where biodiversity is currently protected on public and private land, and make this information publicly available

(b) guide investment in biodiversity conservation on private land.

The prioritisation mechanism should include criteria for prioritisation such as maintaining or establishing connectivity across the landscape and improving protection of good samples of the least protected ecosystems.

24. **Design a legislative framework for action on threatened species and ecological communities that formalises the programmatic approach taken by Saving our Species**, and which:

(a) streamlines and removes duplication in existing requirements for recovery planning, threat abatement and priorities action statements

(b) focuses on outcome monitoring and prioritisation of investment rather than prescriptive legislative provisions.

25. **Replace the current and little-used mechanisms for critical habitat identification with stronger provisions to maintain, conserve and restore areas of 'special biodiversity importance'.**

26. **Consider additional investment in positive conservation action**, including:

(a) additional direct Government investment, via the Nature Conservation Trust, for stewardship payments to landholders who enter into Biodiversity Offsetting Agreements to establish a network of private land conservation (to complement market-driven investment)

(b) Government support, via the Nature Conservation Trust, in the form of an annual grants program and one-off establishment payments to landholders who enter into Voluntary Conservation Agreements

(c) increased funding to the Saving our Species program to increase the number of threatened species secured in the wild.

See **Section 5** for more information.

Managing wildlife interactions

There is a strong community expectation that the Government will manage human interactions with wildlife to ensure, as a society, we are protecting our unique native plants and animals. A risk-based approach to regulation would cut some unnecessary regulatory burden.

The panel recommends that the NSW Government should:

27. **Adopt a tiered and risk-based approach to the regulation of wildlife management** in NSW to credibly regulate high-risk activities and reduce red tape for low-risk activities. The four tiers would be exempt activities, code-based complying activities, assessable/licensed activities, and prohibited activities.

28. **Improve the public's knowledge and understanding of wildlife conservation and management** through community-oriented education programs about native plants and animals, the impacts of human-wildlife interactions, and the welfare needs of animals in captivity.

29**. Facilitate effective local wildlife care through strategic partnerships with wildlife rehabilitation providers**.

See **Section 6** for more information.

Knowledge, information and science

Building and sharing knowledge about the status and values of biodiversity and the effectiveness of interventions is critical to making informed decisions about how best to protect and manage biodiversity and increase ecosystem services. Bringing together information on biodiversity, including local and Aboriginal knowledge, and making this information publicly available, should be priorities for the Government.

The panel recommends that the NSW Government should:

30. **Better harness data collection efforts and make this data available to the public** as part of open government through a whole of government biodiversity portal.

31. **Align NSW listing categories and assessment criteria for threatened species and ecological communities** with those of the International Union for Conservation of Nature and review supporting guidelines.

32. **Adopt a more strategic approach to listing threatened species and ecological communities**.

33. **Require the NSW Scientific Committee to undertake periodic five-year reviews of lists. These reviews should be subject to independent scientific peer review**.

34. **Work with the Commonwealth Government to harmonise State and Commonwealth lists of threatened species and ecological communities.**

35. **Prioritise improvements to the plant community types classification system and the development of maps to support decision making (including threat and risk assessment for ecological communities).**

36. **Develop and implement a robust whole of government monitoring and evaluation framework** to enable reporting on the condition (quality and extent) of biodiversity, effectiveness of management actions and the objectives of the proposed new 'Biodiversity Conservation Act'.

37. **Mandate a statutory review of the legislation every five years** to assess whether the proposed new 'Biodiversity Conservation Act' is meeting its objectives.

38. **Establish an expert panel** to advise the Minister for the Environment on matters relevant to the operation of the new 'Biodiversity Conservation Act'.

39. **Repeal the requirement to prepare a statewide Biological Diversity Strategy**.

See **Section 7** for more information.

Objects for a 'Biodiversity Conservation Act'

Given the breadth of reforms proposed throughout this report, the panel recommends that Government should draft a new 'Biodiversity Conservation Act' to replace the current legislation. It will also be necessary to make consequential amendments to the planning system, the *Local Land Services Act 2013* and other legislation (e.g. to deal with private native forestry).

The panel recommends that the NSW Government should:

40. **Modernise and simplify the legislative framework** by:

(a) repealing the laws (or parts) under review

(b) drafting a new 'Biodiversity Conservation Act' that takes an outcomes-focused, integrated and risk-based approach to biodiversity conservation, adopts the legislative objects outlined in Recommendation 42 and establishes the mechanisms recommended in this report

(c) making consequential amendments to other laws to transfer the regulation of agricultural development to the planning system and supervision of agricultural land management to the Local Land Services.

41. **Adopt an overarching goal for the proposed new 'Biodiversity Conservation Act'**:

to maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development.

42. **Adopt objects for the proposed new 'Biodiversity Conservation Act'**:

(a) to conserve biodiversity and ecological integrity at bioregional and state scales

(b) to facilitate sustainable development

(c) to improve and share knowledge, including local and Aboriginal knowledge, about the status and values of biodiversity and ecosystem services and the effectiveness of conservation actions.

43. **Amend the definition of Ecologically Sustainable Development** in the *Protection of the Environment Administration Act 1991* to require integration of social (as well as economic and environmental) considerations in decision-making.

See **Section 8** for more information.

3. Conservation in development and land management

Native vegetation plays an important role in supporting agricultural productivity and maintaining biodiversity. In many contexts, it controls erosion by protecting soils and riverbanks, reduces land degradation and salinity, improves water quality and availability and provides habitat for wildlife, including threatened species (OEH 2014e).

The *Native Vegetation Act 2003* regulates the clearing of native vegetation for some activities, in some parts of NSW. It was introduced to prevent broadscale clearing unless it 'improves or maintains' environmental outcomes.[10] In practice, clearing regulated by the Act is carried out for two main purposes:

- agricultural land management – existing agricultural operations involving the clearing of native vegetation (e.g. collecting firewood, construction of rural infrastructure, management of invasive native scrub, clearing paddock trees in cultivation). This clearing does not result in land use change.
- agricultural development – land use change (including clearing of native vegetation) for new agricultural operations (e.g. conversion of grazing land to cropping).

Clearing of native vegetation in the rural and rural residential areas of NSW assessed under the *Native Vegetation Act 2003* can only be approved if environmental outcomes are 'improved or maintained' at a site scale. The *Native Vegetation Act 2003* applies a hierarchy of controls over what landholders can and cannot do depending on the likely environmental value of the vegetation. There is very little flexibility to consider social and economic factors when farmers propose new agricultural development on

'The current context is one of distrust, unwillingness, disconnect and confusion'.

NSW Farmers

'All assessments should be made against the same legislation with an agreed set of guidelines and policies to maintain consistency and accountability and areas in policies'.

Urban Development Institute of Australia

'Biodiversity decision making processes must be robust, transparent and science-driven, underpinned by objective scientific assessment methodologies'.

NSW Environmental Defender's Office

[10] Bombell & Montoya (2014) contains a comprehensive history of native vegetation clearing laws in NSW.

previously uncleared land.

On the other hand, decision-making processes under the *Environmental Planning and Assessment Act 1979* — for urban and infrastructure development and extractive industries such as mining — explicitly require decision-makers to consider the social, economic and environmental benefits and impacts of a project before granting an approval. Assessment mechanisms under the *Threatened Species Conservation Act 1995* and the new Biodiversity Offsets Policy for Major Projects provide greater flexibility than the *Native Vegetation Act 2003* for proponents to avoid (where possible) or minimise and then offset the biodiversity impacts of development outcomes.

The panel has considered an evaluation of the current regulatory system (OEH 2014d) and issues raised by stakeholders in written submissions and meetings. The panel has heard that the farming community feels strongly that the *Native Vegetation Act 2003* is preventing them from getting on with the business of farming and does not recognise that the agricultural sector has adopted better agricultural practices due to improvements in technology. Indeed, the scope of the *Native Vegetation Act 2003* extends well beyond land use change, regulating a large number of land management activities that have long been a routine part of farming operations. These activities include management of invasive native scrub and construction of on-farm infrastructure such as fences and roads. While the planning system considers social, economic and environmental factors to inform decisions, the native vegetation laws are based on a 'command and control' system that stifles innovation and forces landholders to absorb the costs of public goods delivered by biodiversity conservation on private land (submission 347 & Evidentiary 2014).

The panel has also considered submissions from conservation stakeholders such as the Environment Liaison Office that call for the current 'improve or maintain' standard applied at the site scale to either be retained or strengthened (ELO 2014). However, this standard has created significant social and economic inequities for the farming community and is inconsistent with Ecologically Sustainable Development. These legislative arrangements have created an uneven playing field between agricultural development and other forms of development.

Land use change that involves clearing of native vegetation should be treated like all other forms of development: assessed and approved under the *Environmental Planning and Assessment Act 1979*. The 'improve or maintain' standard should not be imposed at a site scale. Rather, site-scale decisions should be based on a balanced and transparent appraisal of the environmental, social and economic impacts of proposed agricultural development and biodiversity impacts should managed through a biodiversity offsetting scheme that applies the 'avoid, minimise and offset' hierarchy.

Where a development application is refused because the vegetation proposed to be cleared is of such a high-conservation value that the social and economic benefits do not outweigh the biodiversity impacts of the clearing, the Government should consider whether one of the private land conservation mechanisms outlined in Section 5.1 should be entered into. These arrangements will help to ensure that the biodiversity values of the area that could not be cleared for development are protected and properly managed into the future. If such areas are assessed to be more important for conservation than production, the Government should ensure that landholders are funded to manage and protect the biodiversity values on such land.

The panel has come to the view that a risk-based approach is more appropriate for agricultural land management activities. A risk-based approach to regulation focuses on ensuring the regulatory response (if any) is proportionate to the risk arising from the activity – the product of the probability of an adverse impact occurring and the consequences of that impact if it does occur.

The panel considers that Local Land Services are the most appropriate body to oversee agricultural land management activities and provide extension and education services to landholders. On this basis, the panel recommends that agricultural land management activities that involve clearing or modifying native vegetation be incorporated into the *Local Land Services Act 2013*. A regionally-based service delivery model would be consistent with the Government's commitment to devolving decision making to regional and local levels.

The panel believes there are two specific contexts where application of the *Native Vegetation Act 2003* has proven to be particularly inappropriate:

- Native grasslands (for example in the Cooma-Monaro and Central West regions) are highly valued by their owners as pastures providing resilience against drought. They can be modified to be dominated by exotic grasses and legumes and the application of fertiliser enhances pasture productivity. However, grasslands disturbed by the large scale application of herbicides, cultivation, sowing of exotic pasture species and fertilising rarely return to their original ecological condition. Modification of native grasslands is an important agricultural land management tool that should be automatically allowed where grasslands are of low-conservation value.
- Private native forestry (for example, on the North Coast, in the New England region and the red gum forests in the Murray region). When carried out sustainably, forestry is not a form of land use change because the forest regenerates after harvesting.

A proposed approach to native grasslands and private native forestry is outlined in Sections 3.1 and 3.2.

Recommendation 1 – Level the playing field for agricultural development and land management activities by:

(a) repealing the *Native Vegetation Act 2003*

(b) removing the 'improve or maintain' standard for clearing of native vegetation at a site scale

(c) taking a risk-based approach to managing the biodiversity impacts of modifying native vegetation during agricultural land management activities by incorporating legislative arrangements for agricultural land management activities into the *Local Land Services Act 2013*

(d) treating all forms of development in a consistent and fair way, by integrating the assessment and approval of all forms of agricultural development that involve clearing of native vegetation (that is not managed under the *Local Land Services Act 2013*) into the *Environmental Planning and Assessment Act 1979*

(e) using private land conservation mechanisms to protect and manage the biodiversity values of areas in cases where a development application is refused because the vegetation proposed to be cleared is of very high-conservation value.

3.1 How would the new approach work?

Figure 1 outlines how the range of activities regulated under the current system would be treated under the proposed approach. More information on how each type of activity should be regulated is set out below.

Agricultural land management activities

Landholders should be able to undertake some agricultural land management activities without the need for any approval ('exempt agricultural land management'). [11] This is similar to the current routine agricultural management activities. [12] As shown in **Figure 1**, these activities could include continuing existing cultivation and paddock rotation practices, clearing for rural infrastructure, sustainable grazing and collecting firewood for non-commercial purposes.[13]

Some land management activities can, if poorly managed, have negative impacts on the environment. These should be managed through codes of practice that set out best practice management approaches to avoid, minimise or offset the biodiversity impacts of those activities ('code-based agricultural land management'). As shown in **Figure 1**, activities that could be authorised under a code of practice include thinning, managing invasive native species and clearing paddock trees in cultivation, clearing of groundcover, managing moderate-conservation value grasslands, clearing for environmental works and uprooting mulga. The codes of practice should be developed in consultation with the community to ensure local and Aboriginal knowledge about land management is taken into account.

Landholders could undertake code-based agricultural land management activities by determining that the clearing is consistent with a code and/or approaching Local Land Services to certify a proposed property management plan. If a landholder is proposing to do an activity with higher environmental impacts than would be exempt or compliant with a code, development consent under the *Environmental Planning and Assessment Act 1979* would be required. Local Land Services should develop guidance material for officers to ensure that consistent advice is provided to landholders and consistent decisions are made in certifying property management plans.

The *Local Land Services Act 2013* would need to be amended to establish an offence for clearing or other land management activities not permitted under the Act or not carried out in accordance with the codes of practice. Local Land Services would be responsible for monitoring and enforcing compliance with the Act and the codes. Clearing in accordance with a code of practice or exemption under the *Local*

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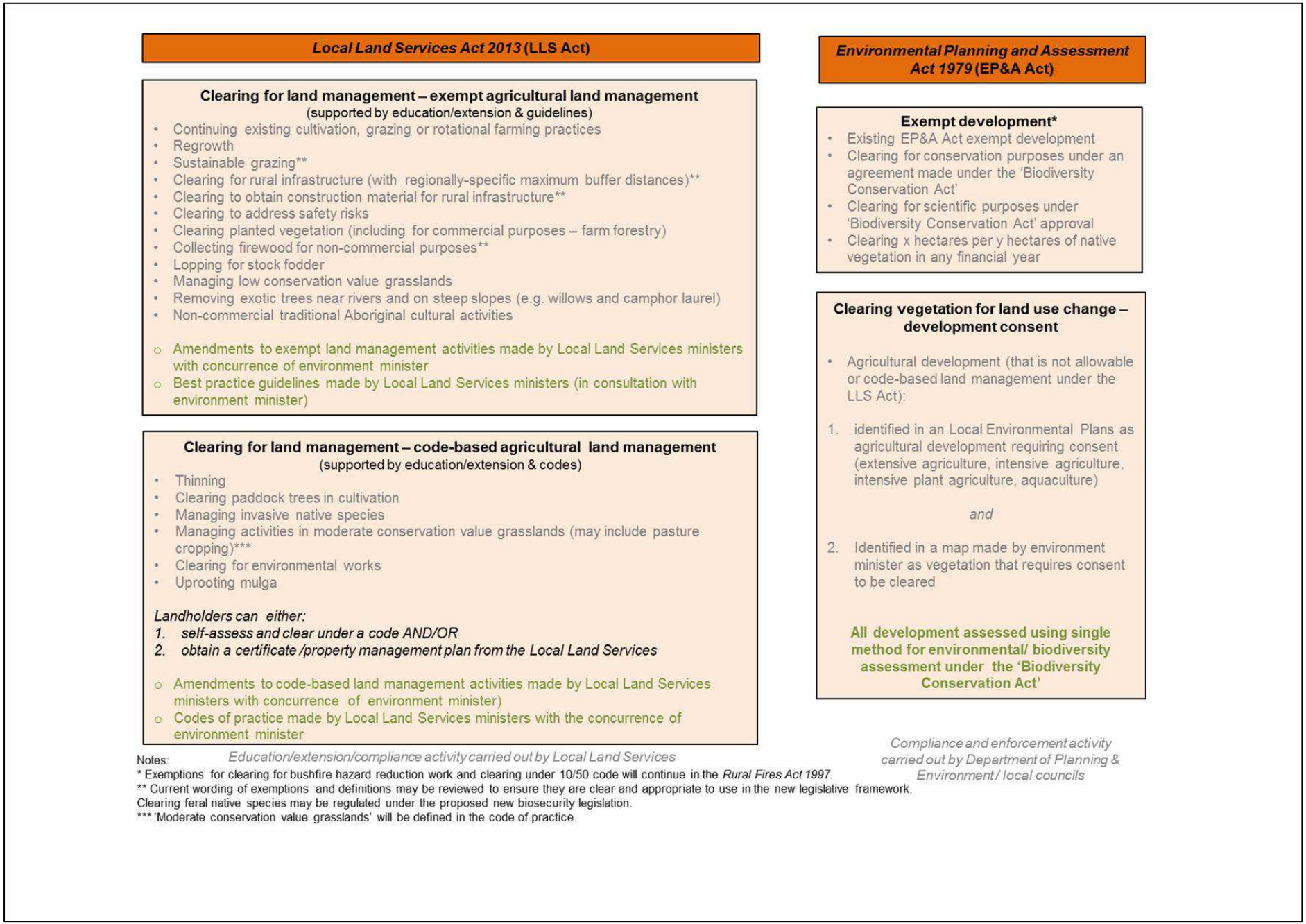
[11] Similar to current arrangements under the Native Vegetation Regulation 2013, a smaller number of agricultural land management activities should be permitted on vulnerable lands (near rivers and on steep slopes) in recognition of the fact these areas of NSW are especially vulnerable to soil erosion, sedimentation and landslip if appropriate techniques are not used when clearing trees.

[12] Some of the current definitions and wording for these activities should be reviewed to ensure they are clear and are still appropriate (e.g. sustainable grazing, groundcover, rural infrastructure, collecting firewood, clearing for construction timber).

[13] The *Local Land Services Act 2013* should not apply on land already protected under other legislative tools such as conservation agreements, biobanking agreements and offset areas. Land management activities allowed in these areas would be specified in the management agreement for that area.

Land Services Act 2013 would act as a defence against the offence of harm to threatened species under the proposed new 'Biodversity Conservation Act'.

Figure 1 – How activities regulated under the current native vegetation laws would be regulated in the future



How should the Government support landholders doing agricultural land management activities?

The Government should support landholders carrying out agricultural land management activities as part of natural resource management education and extension services. These services should be supported by non-statutory best practice guidelines for low-risk land management activities as required, and enforceable codes of practice for land management activities that can impact on the environment. Given the new approach will not include the current site scale 'improve or maintain' environmental outcomes standard, new codes will be required for all code-based land management. This will include remaking the current self-assessable codes for thinning native vegetation, clearing isolated paddock trees in cultivated areas and clearing invasive native species. These codes should be written to balance production imperatives with best available measures to minimise any adverse environmental impacts, particularly for threatened species or communities. The codes of practices should be simple and easy to apply and be focused on sustainable land management outcomes. Rewriting the codes in this way should lead to more agricultural land management activities being allowed to be carried without an approval without compromising environmental outcomes on the ground.

A number of submissions from farmers raised concerns about the extent to which the current native vegetation laws respond to local environmental and social conditions.[14] While the proposed arrangements for agricultural land management activities would apply across NSW, the Government should also ensure that guidelines and codes of practice allow for regional variations to recognise that both landscape needs and appropriate management practices vary from region to region. For example, buffer distances for construction of rural infrastructure should be regionally specific. Codes of practice for managing moderate-conservation value native grasslands should include practical rules that take into account differences in the extent and condition of native grasslands and management practices in different regions.

Landholders could be required to notify Local Land Services before clearing under a relevant code of practice. An online notification process would make this process quick, cheap and easy for landholders. Notification should give landholders an opportunity to request advice from Local Land Services on how to best implement activities under the codes. It also gives Local Land Services and the community information to help understand the extent of native vegetation clearing or modification carried out under codes of practice for compliance purposes, and assess how well the codes of practice are working. Notification should therefore only be required for agricultural land management activities that can be detected using satellite imagery (e.g. clearing of woody vegetation such an invasive native species).

[14] See submissions 11, 50, 86, 88, 106, 109, 122, 129, 208, 212, 236, 299, 327, 331, 347, 349, 352, 361, 363 & 375.

Recommendation 2 – Support landholders and promote best practice for agricultural land management activities by:

(a) developing best practice guidelines for low-risk and therefore exempt land management activities where required

(b) developing new enforceable codes of practice for those management activities that can have environmental impacts

(c) providing landholders with the option of obtaining a certificate from Local Land Services to confirm that proposed clearing is compliant with a code of practice

(d) developing guidelines and codes of practice for agricultural land management activities that reflect regional differences in landscapes and agricultural land management practices

(e) developing an on-line system for landholders to notify Local Land Services before clearing under a relevant code of practice.

How should the potential environmental impacts of agricultural land management activities be managed?

While the proposed approach would provide landholders with more flexibility to carry out agricultural land management activities without the need for a formal approval, any potential biodiversity impacts should be appropriately minimised consistent with the objects of the proposed new 'Biodiversity Conservation Act'.

This outcome can be achieved for agricultural land management activities that can impact on the environment by providing for the Minister administering the proposed new 'Biodiversity Conservation Act' to have a concurrence role in the making of the codes of practice, as well as future decisions about any new categories of land management activities that do not require approval.

Recommendation 3 – Ensure that, where biodiversity impacts of agricultural land management activities can have an environmental impact, such impacts are appropriately managed by providing for the Minister administering the proposed new 'Biodiversity Conservation Act' to have a concurrence role in the making of the codes of practice, as well as any decisions about new categories of exempt land management activities.

Agricultural development

There are many different pathways for approving development, infrastructure and other activities under the *Environmental Planning and Assessment Act 1979*.

Some development does not require development consent (exempt development) and certain development can be quickly approved if pre-determined standards are met (complying development). Exempt and complying development are generally lower impact developments that are unlikely to negatively impact the environment and community, and therefore do not require specific consideration of biodiversity impacts by a consent authority.

Higher-risk development is formally assessed and approved by councils, state government agencies, joint regional planning panels or the Planning Assessment Commission, on behalf of the Minister administering the *Environmental Planning and Assessment Act 1979*, depending on the class and scale of development.

The panel proposes that agricultural development should be assessed and approved under the *Environmental Planning and Assessment Act 1979* in the same way as all other development. This would mean that social, economic and environmental considerations would need to be taken into account when deciding whether an agricultural development can proceed. It also means that landholders would be responsible for the costs of the assessment process where development consent is required. Local councils and the Department of Planning and Environment would be responsible for monitoring and enforcing compliance with approval requirements and development consent conditions, as they currently do for other development consents.

Clearing for non-agricultural development purposes that may currently require an approval under the *Native Vegetation Act 2003* (e.g. certain types of developments in rural residential areas, dwellings, council infrastructure and tourist facilities) would be treated like any other form of development under the *Environmental Planning and Assessment Act 1979*. This will remove the current problem of dual consents where landholders are required to obtain an approval under both planning and native vegetation laws for the same activity.

What types of agricultural development should require consent?

The *Native Vegetation Act 2003* relies on unclear definitions to determine what vegetation can and cannot be cleared without approval. These definitions create uncertainty and confusion.

It is important that landholders and the broader community have certainty about what types of agricultural development would need to be assessed and approved under the *Environmental Planning and Assessment Act 1979*. This Act uses Local Environmental Plans to set out what types of development are permitted or prohibited within each area and land use zones. For agricultural development, in zones where agricultural uses are permitted, some development is permitted without consent, some is permitted with consent and some is prohibited.

The four types of agricultural development currently recognised in Local Environmental Plans are:

- **Aquaculture** – cultivating fish or marine vegetation for the purposes of harvesting and selling the fish or marine vegetation or their progeny, or keeping fish or marine vegetation in a confined area for a commercial purpose (such as a fish-out pond).
- **Extensive agriculture** – production of crops or fodder (including irrigated pasture and fodder crops) for commercial purposes, the grazing of livestock for commercial purposes, bee keeping, and pasture based dairies.
- **Intensive plant agriculture** – cultivation of irrigated crops for commercial purposes (other than irrigated pasture or fodder crops), horticulture, turf farming, and viticulture.

- **Intensive livestock agriculture** – keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, horses or other livestock that are fed wholly or substantially on externally-sourced feed. This includes restricted dairies, feedlots, piggeries and poultry farms.

In addition to defining the types of agricultural development that requires consent, other states including Victoria and Queensland have moved to using maps to define important biodiversity values and land that cannot be cleared without approval (OEH 2014d)[15]. This use of maps is a far simpler and more efficient alternative to the current approach taken under the *Native Vegetation Act 2003*.

Landholders should be provided with certainty about whether their type of agricultural development requires consent under the *Environmental Planning and Assessment Act 1979.* To provide this certainty, two reforms to the current system are required. First, Local Environmental Plans should be amended to require development consent for agricultural development that includes native vegetation clearing in those land use zones where:

- any type of agriculture is currently permitted without consent[16] or
- a landholder wants to change between one land use and another land use and there is an intensification of use within the same category of agriculture (e.g. changing from grazing to cropping which are both included in the 'extensive agriculture' category).

Then, if a landholder wants to carry out that type of agricultural development on his or her property, he or she should be able to refer to a map made by the Minister for the Environment. **Figure 2** provides an example of what one of these maps might look. The map shows:

- areas identified in Landsat imagery and/or aerial photography that were cleared prior to approximately 1990 or since then with approval shown in category 1 areas – these areas can then be developed or cleared without the need for any approval
- low-conservation value grasslands in key local government areas shown in category 1 areas – these areas can be developed or cleared without the need for any approval[17]
- important vegetation (e.g. remnant woody vegetation) shown in category 2 areas – development consent will be required to clear this vegetation unless the landholder is doing an exempt or code-based land management activity included in the *Local Land Services Act 2013* or exempt development under the *Environmental Planning and Assessment Act 1979*

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[15] For an example of comprehensive native vegetation maps readily accessible to Victorian landholders, see <http://www.geoplex.com.au/work/native-vegetation-information-management-system-nvim/>.

[16] No changes are required in land use zones where agriculture is currently permitted with consent or prohibited.

[17] The rules around the land management and development that can occur in moderate and high conservation grasslands should be proportionate to their conservation value. For example, in moderate-conservation value grasslands, pasture cropping in a proportion of native grasslands on a property could be carried out under a code of practice to ensure that their conservation value is not lost. All types of clearing in high-conservation value grasslands (except exempt land management activities under the *Local Land Services Act 2013*) should require development consent.

- protected areas shown in category 3 areas (such as areas protected under a conservation agreement, an offsetting agreement, or areas of special biodiversity importance referred to in Section 5.5) – these areas cannot be developed further and a limited number of land management activities are permitted (see 'agricultural land management activities' above for more information).

If a landholder believes there is an error with the map for his or her property or believes an area was cleared before 1990, the landholder should be able to request the map be reviewed and amended by OEH within a reasonable timeframe. Review applications should be supported by evidence of previous uses of the land such as aerial photographs. A similar process is already being used in Queensland.

Having the maps in place before the new legislative arrangements come into place will be critical. The Government should ensure that maps are made and ready to be used before the new legislative arrangements come into place. OEH should be properly resourced to ensure that the initial maps can be set up quickly, that the maps can be updated annually and so that requested reviews can be conducted within a timely manner (to be set out in a customer service standard).

Recommendation 4 – Amend Local Environmental Plans to provide landholders with certainty about which types of agricultural development that includes native vegetation clearing would require development consent under the *Environmental Planning and Assessment Act 1979* and use maps to identify areas of land (based on mapped vegetation and previous land use) for which development does or does not require development consent to permit clearing.

Recommendation 5 – Provide OEH with adequate resources to ensure the maps are developed and ready to use before the new arrangements for agricultural development commence, to ensure the maps will be updated annually and for reviews requested by landholders to be processed efficiently.

Figure 2 – Example map

LANDSAT Image 1990

Spot Image 2005

Example property map

Office of Environment & Heritage

Working draft

Category 1 - Vegetation that can be cleared

Category 2 -
(a) Vegetation that can be cleared as agricultural land management, or
(b) Vegetation that can be cleared with development consent

Category 3 - Vegetation that cannot be cleared (e.g. offset area)

N

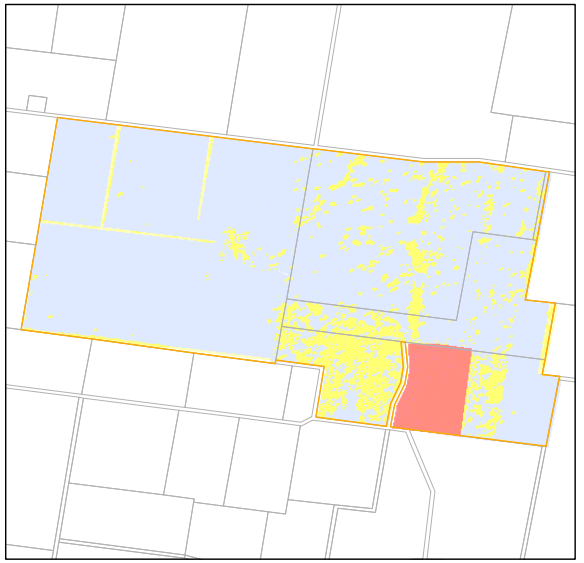
0 0.5 1 1.5 2

Kilometres

Data Sources
NSW Land Use (2000) and Woody Canopy (2011)
LPI DCDB (2014)

ADS40 Image 2009

Spot Image 2012



Property example used with landholder permission Produced by OEH Science Division, November 2014.

Where possible, clearing small areas of native vegetation that are proportionate to the overall area of native vegetation should be treated as exempt development to remove the need for an approval under the *Environmental Planning and Assessment Act 1979*. For example, clearing 'x' hectares of a certain area of vegetation on a property each year, could be classified as exempt development. The precise value of 'x' would need to vary regionally, and probably also with the size of the property in recognition of the different scales of properties across the state and the potential for cumulative impacts to occur. This type of exempt development should minimise red tape and costs for landholders by requiring fewer development consents while still ensuring that biodiversity impacts for higher-risk land use change proposals are assessed before they are approved.[18]

An upper limit, or cap, on the total area of vegetation that could be cleared as exempt development per property would also be required. This would minimise the risk that this type of exempt development might result in or lead to unacceptable cumulative impacts on biodiversity that would otherwise have required assessment had it been proposed as a single activity. Taking a ratio-based approach to setting exemptions will also contribute to ensuring that biodiversity is conserved at bioregional and state scales, consistent with the panel's proposed objectives for the new 'Biodiversity Conservation Act'.

There may be some significant negative biodiversity outcomes arising out of an exemption of this nature. For example, because the exemption does not take into account the conservation value of the vegetation that can be cleared without development consent, there is a risk that areas of high-conservation value such as endangered ecological communities and geographically restricted threatened plant species could be cleared. There are options available to minimise this risk. For example, one option would be to make the clearing 'complying development' under the planning system. This would remove the need for development consent if the landholder could satisfy the local council that the vegetation proposed to be cleared is of low-conservation value. If the vegetation is of high-conservation value, development consent would be required. Another option would be to not allow the exemption to apply in landscapes that are already overcleared.[19]

It is also important that Government monitor the extent of clearing to ensure the allowance to clear some vegetation as exempt development is not abused. Of the four types of agricultural development included in the planning system, only intensive livestock agriculture and aquaculture can be considered to be a major project under the *State Environmental Planning Policy (State and Regional Development) 2011*. To ensure that the social and economic impacts of

[18] In Queensland, native vegetation can be cleared for land use change without development approval if the lot is less than five hectares in size. In Victoria, native vegetation can be removed with the need for consent on sites less than 0.4 hectares in size. Neither of these approaches take into account the cumulative impacts of clearing across the landscape.

[19] Overcleared landscapes called 'Mitchell landscapes' are defined as landscapes in which more than 70 percent of native vegetation cover has been cleared (DECCW 2011). The 580 Mitchell landscapes in NSW have been mapped (1:250,000 scale) and could be used to identify where this type of exempt development does not apply.

large scale extensive agriculture and intensive plant agriculture is also assessed and approved like other major projects, the panel proposes that any forms of agricultural development with a capital value of $30 million or more should be listed as State Significant Development under the *State Environmental Planning Policy (State and Regional Development) 2011*.

Recommendation 6 – Set requirements for agricultural development approved under the *Environmental Planning and Assessment Act 1979* that are proportionate to the scale and intensity of the proposed development and associated land clearing (including categories of exempt development and State Significant Development).

3.2 Timber harvesting on private land

Under the *Native Vegetation Act 2003*, native timber harvesting on private land is treated as a type of native vegetation clearing which must 'improve or maintain' environmental outcomes. Private landholders who want to harvest any timber for commercial purposes are required to obtain an approval and carry out forestry operations in accordance with a code of practice.

Private native forestry sits uncomfortably in the *Native Vegetation Act 2003*. Sustainable native timber harvesting[20] is not a form of land use change. Requirements to retain minimum basal area requirements[21] and tree retention standards[22] and standards for particular harvesting practices mean that the forest should regenerate after harvesting and continue to provide important non-timber values including habitat for threatened species.

At the same time, the review of the private native forestry code of practice in 2012 showed that conservation stakeholders have concerns about the levels of biodiversity protection provided by the code of practice given that pre-harvest surveys to identify threatened species are not required (NSW EPA 2013).

Forestry operations on private land also range in scale and intensity. Some landholders obtain an approval to carry out low intensity timber harvesting to supplement income from other agricultural activities. Others engage harvest and haulage contractors to remove larger volumes of timber. Landholders are responsible for complying with the code of practice and regulatory action cannot be taken against contractors who do the wrong thing under the current legislative framework.

Over time, larger volumes of timber are being sourced from private land and being used to supplement timber supply contracts that the Government has with mill owners, particularly on the north coast (The Audit Office of NSW 2009 & Forests NSW 2011). In addition, harvest and haulage operators work on both private and public land (state forests). The biodiversity impacts of native timber harvesting on public land are regulated through integrated forestry operations

[20] Defined as management of forests to maintain their full range of environmental, social and economic values.
[21] Basal area is a forest measurement that can help forest owners estimate tree volumes and understand and manage stand density and competition.
[22] Certain trees are retained during forestry operations because they provide habitat and/or food for native wildlife.

approvals made under the *Forestry Act 2012* that are currently being reviewed under a separate process.

Given the complexity of issues surrounding native forestry management and the structure of the timber industry in NSW, it would be more appropriate for the Government to consider how to best regulate timber harvesting on private land in a separate process to this review. In doing so, the Government should consider developing an outcomes-based regulatory system that focuses less on whether harvesting occurs on private or on public land. Rather it should focus on the scale and intensity of operations and hence the environmental impacts. For example, small-scale operations on private land could be conducted under a new code of practice, removing the need for approval in some cases. More intense operations on private land and timber harvesting on Crown land (state forests) should still have regulatory oversight to ensure that the biodiversity, soil and water impacts of these operations are appropriately managed.

Options for improving the environmental performance of haulage and harvest contractors on public and private land should also be considered. These options may include education and capacity building, licensing or minimum standards and mechanisms that give regulators the ability to take enforcement action against contractors that knowingly carry out operations that negatively impact on biodiversity and ecosystem services such as soil and water.

Recommendation 7 – Review regulatory arrangements for timber harvesting on private land as part of a separate process that:

(a) does not regulate the harvesting of native timber on private land as a form of land use change

(b) considers options for regulating sustainable forestry operations based on their scale and intensity rather than tenure, including options for permitting low-intensity operations on private land without the need for approval and a focus on outcomes rather than process

(c) considers a range of options for improving the environmental performance of haulage and harvest contractors operating on private and public land, including licensing and minimum standards.

3.3 Risk-based threatened species licensing

It is common across other Australian jurisdictions, as well as New Zealand, Canada and the United States, to prohibit actions which harm threatened species. A range of penalties are used and the potential for imprisonment is often included. It is also common for legislation to establish a regime of licensing or authorisation. Holding a licence or authority is treated as a defence to causing harm. Licences are commonly issued for the carrying out of conservation or other environmental management activities.

In NSW, there are some activities that harm threatened species and communities and their habitats that are not assessed and approved as 'development' under legislation such as the

Environmental Planning and Assessment Act 1979 (e.g. relocation of threatened species from a property to prevent damage).[23] These activities are currently assessed and approved through the threatened species licensing regimes in the *Threatened Species Conservation Act 1995*. Obtaining a licence acts as one of the defences to the offence of harm to threatened species and communities.

The current system is inefficient for applicants and government. The vast majority of these applications are assessed as not having a significant impact and not requiring a licence. Applications should only be required for activities that are not low risk and where the impacts on threatened species need to be considered on a case-by-case basis. The Government should evaluate the types of activities for which applications are currently made and determine which types of low-risk activities can be conducted under legally enforceable guidelines and which very low-risk activities should be exempt. Exemptions could include removal or trimming of vegetation for safety or bush fire hazard reduction, activities carried out for a conservation purposes and any activities that do not require approval under the *Local Land Services Act 2013*.

Other low-risk activities, such as vegetation management at flying fox camps, that are generally carried out in the same way, could be authorised under enforceable codes of practice made under the proposed new 'Biodiversity Conservation Act'. If a proponent can do the activity while complying with a code of practice, an application for a licence would not be required. Carrying out the activity in accordance with a code of practice would be a defence to offences of harming threatened species or communities.

Activities that do not fall under one of the exemptions or a code of practice or cannot be performed under one of the guidelines would still require a licence application. The Minister for the Environment should develop publicly available guidelines to ensure that all applications are assessed in a consistent and transparent manner.

The licensing functions of the *Threatened Species Conservation Act 1995* would be repealed and replaced by new provisions in the proposed 'Biodiversity Conservation Act'.

Recommendation 8 – Adopt a risk-based approach to licensing threatened species 'harm' to:

(a) exempt very low-risk activities from the need to apply for a licence

(b) permit low-risk activities to be carried out under an enforceable code of practice

(c) require a licence application for all other activities that are not low risk, that is assessed against publicly available guidelines.

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[23] Under section 91 of the *Threatened Species Conservation Act 1995,* activities that may require a licence include 'harm to, or picking of, a threatened species, population or ecological community, damage to critical habitat; or damage to a habitat of a threatened species, population or ecological community' (section 91). 'Harming' an animal (including an animal of a threatened species, population or ecological community) includes hunting, shooting, poisoning, netting, snaring, spearing, pursuing, capturing, trapping, injuring or killing an animal (Section 5 of the *National Parks and Wildlife Act 1974*).

3.4 Capacity and resourcing implications

While the approach outlined in this report will become more efficient over time, it may require additional funding for state government agencies and councils in the short-term where demand for development may be high. For example, councils will require capacity building and additional resources to assess development applications for proposals involving agricultural development. Getting funding arrangements right and building capacity will be critical to the success of the proposed model.

In order to work well, the approach outlined in this report will require strong cooperation between relevant agencies on a range of issues including compliance and monitoring, evaluation and reporting. The Government should ensure that the roles and responsibilities and information sharing processes are agreed between agencies through a memorandum of understanding between Local Land Services, OEH and the Department of Planning and Environment.

Building on the successful model established by the Biobanking Scheme, consideration should be given to maximising the use of accredited third parties to assess the biodiversity impacts of development applications under the *Environmental Planning and Assessment Act 1979*. This would contribute to addressing skill and capacity issues within local government.

Recommendation 9 – Ensure adequate funding and develop capacity building programs to ensure Local Land Services and councils have the appropriate skills and adequate resources to implement the proposed model.

Recommendation 10 – Maximise the use of accredited third parties to assess the biodiversity impacts of development applications made under the *Environmental Planning and Assessment Act 1979.*

3.5 Compliance and enforcement

It is well accepted that modern regulatory systems should take a risk-based approach to compliance and enforcement. This involves:

- identifying the risks associated with non-compliance and allocating resources to higher-risk activities
- developing a culture that allows both the regulated party and the regulator to develop creative solutions to identified problems to ensure compliance
- giving the regulator a range of innovative regulatory tools
- retaining enforcement as the last sanction (Sparrow 2000).

A range of tools are available to achieve the desired outcomes, ranging from education and extension for low-risk activities to formal enforcement action (such as penalty infringement notices and prosecutions). A greater emphasis should be placed on mechanisms that educate the regulated community and encourage voluntary compliance across all sectors. The use of non-statutory guidelines and codes of practice for agricultural land management would provide some of the tools required to promote voluntary compliance.

At the same time, the proposed approach to managing the biodiversity impacts under the new 'Biodiversity Conservation Act' is one that places high levels of trust in landholders 'to do the right thing'. This means that where the rules are knowingly broken, enforcement action must be taken that is commensurate with the seriousness of an offence. Penalties should be set at a high enough level to act as a deterrent and allow regulators to effectively penalise or prosecute those who do the wrong thing. Penalties cannot be set at a level where they are simply a 'cost of doing business'. The Government has recently increased penalties for the ten most serious pollution offences under the Protection of the Environment (General) Regulation 2009 and introduced a tiered system of penalties for breaches of the *Environmental Planning and Assessment Act 1979* based on the seriousness of the offence. This model could be considered for offences under the new 'Biodiversity Conservation Act'.

The compliance and enforcement powers across the current laws are inconsistent. This creates uncertainty for regulators and landholders. The panel encourages the Government to adopt consistent compliance and enforcement powers.

Recommendation 11 – Take a risk-based approach to regulation that emphasises education and voluntary compliance while still giving regulators the tools to take enforcement action against those who do the wrong thing, in a way that is commensurate with the seriousness of an offence.

3.6 Same biodiversity impacts, same biodiversity assessment method

Over time, a number of different assessment methods have been introduced to assess the biodiversity impacts of land management activities and land use change in NSW. These methods include:

- the assessment of significance (or seven-part test) used for non-major projects and activities approved under the *Environmental Planning and Assessment Act 1979*
- biodiversity impacts described in an environmental impact statement used for major projects and some activities approved under the *Environmental Planning and Assessment Act 1979*
- the Environmental Outcomes Assessment Methodology used to determine approvals under the *Native Vegetation Act 2003*
- the Biobanking Assessment Methodology used for assessments under the BioBanking Scheme
- the Framework for Biodiversity Assessment used for the major projects under the Biodiversity Offsets Policy for Major Projects
- the Biodiversity Certification Assessment Methodology used to determine whether biodiversity certification can be granted under the *Threatened Species Conservation Act 1995*.

Apart from the inefficiencies associated with multiple assessment pathways, the seven-part test and environmental impact statement processes for assessing biodiversity impacts are less likely to be applied consistently across NSW because they are more subjective and rely heavily on consent authority discretion. While a benefit of these more subjective approaches is their flexibility in allowing assessment approaches to be tailored on a case-by-case basis, this comes at

the cost of lack of certainty for proponents and transparency in decision-making on biodiversity impacts from project to project.

The Environmental Outcomes Assessment Methodology, BioBanking Assessment Methodology and Biodiversity Certification Assessment Methodology provide more standardised, metric-based approaches for assessing biodiversity impacts. These methods provide greater certainty and transparency about how biodiversity impacts should be addressed. Issues have been raised about their inflexibility in specifying unacceptable impacts and options available for offsetting. The new Biodiversity Offsets Policy for Major Projects and associated Framework for Biodiversity Assessment seek to address these concerns.

To reduce inefficiencies and improve the consistency, certainty and transparency of biodiversity assessments, all development should be assessed using one, scientifically-based and independently-reviewed method. The same methods and assumptions should be used in quantifying loss of biodiversity at a development site and, where required, predicting biodiversity gains at an offset site.

Specific policy rules may need to be applied by consent authorities in deciding whether to approve different types of development, after the assessment of impacts. For example, projects that are of particular social or economic benefit to the state (i.e. a major project) may be permitted to have biodiversity impacts that would otherwise be considered unacceptable. Alternatively, where the development site is of particular environmental significance and the development is not considered to be a major project, unacceptable impacts should be avoided. Weighing up these considerations should be undertaken by the consent authority having regard to the decision-making approach required under the *Environmental Planning and Assessment Act 1979* including the object of ecologically sustainable development. However, the method for assessing impacts should be the same. The method will also need to consider how to assess the indirect impacts of development on threatened populations not related to habitat loss (e.g. road mortality and disturbance to behaviour and breeding cycles from infrastructure, noise, lighting etc.).

In addition to repealing the *Native Vegetation Act 2003*, the proposed 'Biodiversity Conservation Act' would contain a new part that replaces the sections of the *Threatened Species Conservation Act 1995* dealing with the Biodiversity Certification Assessment Methodology and BioBanking Assessment Methodology. The assessment of threatened species licences and requirements for species impact statement including links to the *Environmental Planning and Assessment Act 1979* would be reconceptualised in the new Act.

Recommendation 12 – Adopt a single, scientifically- based, transparent, publicly-available and independently reviewed method for assessing the biodiversity and other environmental impacts of all development in NSW.

In practice, adopting a single assessment method means building on the knowledge developed under the Environmental Outcomes Assessment Methodology, BioBanking Assessment Methodology, Framework for Biodiversity Assessment and Biodiversity Certification Assessment Methodology to develop a new, single method that can apply to all development. The 'improve

or maintain' standard embedded in some of these methods should no longer apply to development assessed at a site scale.

Consistent with best practice principles for regulatory biodiversity assessment (Briggs 2011), the method should be as simple and practical as possible, transparent and readily accessible, and provide flexibility for local conditions. Key issues that will need to be resolved in the development of a single method for biodiversity assessment include:

- determining a risk-based threshold at which a metric approach for assessing impacts should apply, so as not to require onerous assessment of low-risk impacts on biodiversity
- determining how impacts that are considered to be unacceptable should be addressed, including how they are defined and any criteria that may allow them to be impacted
- ensuring that the same range of environmental impacts are assessed for all types of development – for example, soil, water and salinity impacts that affect ecosystem services should be included
- ensuring the method provides for continuous improvement, including incorporating best available and locally relevant data and new knowledge about biodiversity and other environmental impacts over time.

The difference in scale between landscape and site-based assessments means that a number of issues will need to be resolved during the development of a single method. These include:

- establishing thresholds to determine what scale or intensity of development would qualify for a landscape scale assessment as opposed to a site-based assessment
- determining risk-based assessment requirements that encourage the use of the landscape-scale assessments over site-based assessments, while credibly addressing all biodiversity values.

The power to confer biodiversity certification on land and effectively 'switch off' the need for site-based assessments should be retained by the Minister for the Environment.

There is currently a lack of consistency in how offset sites are secured. Not all offset sites are secured in perpetuity, and active ongoing management of biodiversity sites is not required or guaranteed. Different methods used to secure offsets offer varying levels of certainty and flexibility for proponents and landholders.[24] For example, agricultural development and other development assessed using the Environmental Outcomes Assessment Methodology and BioBanking Assessment Methodology must avoid all significant biodiversity impacts and fully offset any remaining impacts with 'like-for-like' areas – while the outcomes of a decision are generally consistent, there is little flexibility. On the other hand, urban and mining development assessed under the *Environmental Planning and Assessment Act 1979* using methods set out in

[24] See OEH 2014d for more information about methods current used to protect biodiversity and avoid species loss in site-based development approval processes in NSW.

the *Threatened Species Conservation Act 1995* give the decision maker significant amounts of discretion. This gives proponents more flexibility but less consistency when compared to other decisions.

The new Biodiversity Offsets Policy for Major Projects addresses these inconsistencies for major projects by introducing clear rules that provide upfront certainty about what mechanisms can be used to secure an offset site. The policy also sets out rules that allow more flexibility when strict 'like-for-like' offsets are not available.

Recommendation 13 – Expand the Biodiversity Offsets Policy for Major Projects to:

(a) create a consistent approach to avoiding, minimising and offsetting biodiversity impacts for all types of development

(b) drive a positive market for landholders to opt in to long-term stewardship contracts to supply environmental services.

The Government has recently announced that it will create a biodiversity offsets fund. This fund should be used for all types of development. The policy and associated offsets fund will drive a larger market for offsets that will enable private landholders to receive stewardship payments for managing biodiversity on their land as a way of meeting proponent offset requirements. The fund will also provide significant benefits for proponents, as it will allow them to make a monetary contribution instead of locating and purchasing offsets themselves.

Recommendation 14 – Expand the biodiversity offsets fund so it applies to all types of development, including the delivery of offsets required under multi-site assessments, such as biodiversity certification.

The following attributes will be important to ensure the fund is effective, efficient and transparent.

- Operation of the fund should be overseen by a body or bodies with appropriate expertise.
- The fund should have an overarching strategic plan informed by priorities identified in the statewide strategy for private land conservation to be implemented by a fund manager (who will manage financial aspects of the fund) and a program manager (who will manage the sourcing of offsets). The fund should not be used to resource other Government programs not directly linked to private land conservation.
- The operation of the fund must be transparent and accountable, with clear rules for sourcing of offsets and a clearly articulated relationship between these offsets and the impacts of development. This relationship should be consistent with the rules articulated under an offsets policy, such as the Biodiversity Offsets Policy for Major Projects. This means the fund will be required to acquire offsets that have a like-for-like relationship with the biodiversity impacted and that are in the same region as the development. The fund should only move to a broader suite of offsetting options where like-for-like offsets are not available.
- While proponents would be required to invest in in-perpetuity offsets to compensate for the in-perpetuity impacts of development, the Government should consider mechanisms to allow

transfer of offsets to other equivalent sites over time in order to build more flexibility into and deepen the biodiversity offsets market.

- Both the financial operations and performance of the fund and its effectiveness in delivering genuine biodiversity offsets should be independently audited. Annual reports for the fund must be publicly displayed and outline all assets and outcomes, including financial holdings and offsets secured.
- Appropriate monitoring arrangements should be put in place to ensure offsets are secured and appropriately managed over time.

Further information on the way the fund manager and program manager would operate is outlined in Section 5.2.

4. Conservation in land use planning

Biodiversity and other environmental issues are addressed through a range of mechanisms in the land use planning system, which is established under the *Environmental Planning and Assessment Act 1979*. The land use planning system includes statutory State Environmental Planning Policies and Local Environmental Plans as well as non-statutory regional and subregional plans that influence local planning decisions. [25]

One of the key mechanisms available to planning authorities to assess biodiversity values at a landscape scale is biodiversity certification under the *Threatened Species Conservation Act 1995*. Biodiversity certification, once conferred, removes the need for site-based biodiversity assessments when development consents are sought under the *Environmental Planning and Assessment Act 1979*. Biodiversity certification improves the transparency and predictability of land use decisions and provides certainty for developers and the broader community about where future development will be located (OEH 2014f, submissions 353, 94, 124).

The panel has considered an evaluation of how biodiversity is considered in the land use planning system (OEH 2014f) and issues raised by stakeholders in written submissions and meetings. Although there are considerable benefits of biodiversity certification, a number of challenges associated with the existing scheme have restricted its uptake. These include the significant upfront investment of time and money that planning authorities (mainly local councils) are required to make, some of the rules used in the methodology that underpins the scheme and a lack of financial mechanism to secure offsets (OEH 2014f).

Stakeholders strongly support the upfront consideration of biodiversity impacts,

> 'All stakeholders, decision makers, developers and local communities would benefit from clarity in development decisions, which would be best achieved through strategic approaches to determining development opportunities while balancing environmental values.'
>
> *Local Government NSW*

> 'Adequately implemented, strategic planning has the potential to ensure connectivity, protect areas and corridors with high biodiversity values, and identify sympathetic land uses within surrounding conservation areas.'
>
> *Planning Institute of Australia*

[25] See OEH (2014f) for more information on how biodiversity conservation is currently integrated into land use planning in NSW.

with many submissions highlighting the benefits of considering biodiversity impacts at a landscape rather than at a site scale (submissions 334, 386, 45, ELO 2014 & Evidentiary 2014). It is acknowledged that conservation outcomes can be delivered more effectively and efficiently at landscape scales because planners can consider connectivity between areas, threats to natural features and relationships between different uses, and can measure the effects of conservation action.

The panel considers that the impacts of land use change and development on biodiversity should be considered as early as possible in the planning system to deliver a wide range of social, economic and environmental benefits. When the environmental values of land are known upfront, future development can be designed to preferentially avoid, minimise or as a last resort offset negative environmental impacts. Considering biodiversity impacts at a landscape scale early in the planning process also means that cumulative impacts of development can be managed more effectively and greater certainty can be provided to the community and developers.

Submissions highlighted that strategic planning, including multi-site biodiversity assessments, is data and resource intensive and requires significant coordination between and within local and state government agencies (e.g. submissions 234 & 386). However, given the potential significant benefits of resolving biodiversity issues for multiple sites early in the planning system, the panel supports efforts to improve and extend the operation of biodiversity certification.

4.1 Aligning the planning and biodiversity conservation systems

Most stakeholders support more consistency and integration between biodiversity conservation mechanisms and the NSW planning system (OEH 2014a). For example, the NSW Environmental Defender's Office suggested that planning legislation can have a greater impact on biodiversity in NSW than primary biodiversity legislation because 'the majority of activities that have the potential to impact on threatened species are regulated and assessed through the Environmental Planning and Assessment Act' (EDO NSW 2014, p. 50). The Urban Development Institute of Australia believes that 'robust assessment of biodiversity issues within a framework of comprehensive strategic planning is an essential part of managing the growth of NSW' (submission 45, p. 24).

The panel agrees with stakeholders that biodiversity and planning laws need to be closely aligned and mutually reinforcing to ensure that biodiversity conservation objectives are considered more effectively in land use planning decisions. The objectives of the new 'Biodiversity Conservation Act' and the principles and objectives for biodiversity conservation outlined in the planning system need to be aligned, including any new state planning policies that may be developed to replace the existing State Environmental Planning Policies.[26]

[26] A new set of state planning policies to replace the existing State Environmental Planning Policies was part of the proposed reforms to the planning system put forward by the NSW Government in 2013.

4.2 Integrating biodiversity objectives and priorities into strategic plans

The panel has found that previous efforts to plan at a regional scale through Regional Strategies and Regional Conservation Plans have had mixed results with significant regional variability. This appears to be because Regional Conservation Plans:

- are prepared through a separate process to Regional Strategies (and by a different government agency)
- are not statutory documents
- often do not align with local council timeframes for preparing Local Environmental Plans (OEH 2014f).

The panel supports a strategic planning framework that gives full regard to biodiversity conservation objectives, priorities and values, at appropriate scales. This should include priorities identified through a statewide framework or strategy for prioritisation of conservation as outlined in Section 5.3.

In order to be effectively integrated into strategic planning and influence land use planning decisions, biodiversity objectives and priorities must be incorporated into the strategic plans themselves (currently Regional Growth and Infrastructure Plans and Subregional Delivery Plans).

Recommendation 15 – Ensure that biodiversity objectives and priorities, including priorities identified in a statewide framework or strategy for conservation or in plans prepared by Local Land Services are:

(a) reflected in any new state planning policies prepared under the *Environmental Planning and Assessment Act 1979*

(b) incorporated in Regional Growth and Infrastructure Plans and Subregional Delivery Plans, instead of in separate Regional Conservation Plans.

4.3 Prioritising areas for biodiversity certification

Multi-site scale biodiversity assessments—that result in site based assessments being 'switched off' through biodiversity certification—can be time and resource intensive (OEH 2014f, submissions 234, 334 & 345). Such assessments should therefore be pursued in areas that are currently, or expected to be in the future, subject to intensive development pressure or land use change, where the benefits will outweigh the upfront costs.

One of the key objectives of Regional Growth and Infrastructure Plans and Subregional Delivery Plans is to identify areas that can support urban growth and other development (OEH 2014f). Consistent with a risk-based approach, biodiversity certification should be focused on proposed high-intensity development areas that also contain important environmental values. The most significant gains can be made by focusing government effort and resources on areas that are most likely to result in conflicts and delays at the development assessment stage. Regional and Subregional plans should be used to identify candidate areas for such assessments and require studies to understand data and information needs.

Recommendation 16 – Identify candidate areas for biodiversity certification in Regional Growth and Infrastructure Plans and Subregional Delivery Plans.

4.4 Improving the efficiency and effectiveness of biodiversity certification

The *Threatened Species Conservation Act 1995* provides for two types of biodiversity certification:

- biodiversity certification of 'specified land'[27], which has only been applied to urban areas to date to support the development of new housing and industrial/commercial development approved under the *Environmental Planning and Assessment Act 1979*
- biodiversity certification of the 'native vegetation reform package'[28], which means that activities carried out in accordance with a Property Vegetation Plan do not require threatened species assessment under the *Threatened Species Conservation Act 1995*.

Given the panel is recommending the repeal of the *Native Vegetation Act 2003*, biodiversity certification of the 'native vegetation reform package' will become redundant. All references to biodiversity certification in the remainder of this section refer to certification of specified land.

Biodiversity certification has been conferred five times in NSW, most notably in the Western Sydney Growth Centres.[29] The panel understands that nine further applications are at different stages of development.

Biodiversity certification offers potential to provide greater certainty within the planning system and improved biodiversity outcomes and, because it can be applied on a multi-site scale, it can be strategically applied. Based on experience to date, the panel believes that the key benefits of biodiversity certification are that it provides certainty about the location of future development, saves time and costs at the development assessment stage, and optimises environmental benefits through the use of the 'avoid, minimise and offset' hierarchy.[30] This should also improve biodiversity outcomes because of its potential for strategic application.

Upfront biodiversity assessments in landscapes that face development pressures and contain sensitive environmental areas can be contentious and take time to resolve (submissions 234 and 245). In essence, upfront multi-site assessments are an attempt to condense tens, if not hundreds of development application assessments into a single process. The Government should focus on making this process as transparent, flexible and streamlined as possible, with adequate operational support and guidance provided to local councils and the broader community.

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[27] Under Part 7AA of the *Threatened Species Conservation Act 1995,* the Minister for the Environment can confer biodiversity certification on land specified in a biodiversity certification strategy.

[28] Under section 126B of the *Threatened Species Conservation Act 1995*, the 'native vegetation reform package' includes the *Native Vegetation Act 2003* and related regulations, the statewide standards and targets for natural resource management recommended by the Natural Resources Commission, the Local Land Services' local strategic plans, and protocols and guidelines adopted or made under the regulations under the *Native Vegetation Act 2003* and the *Natural Resources Commission Act 2003*.

[29] For further information, see OEH's website at <http://www.environment.nsw.gov.au/biocertification/notcert.htm>.

[30] See OEH (2014f) for more information about the benefits of biodiversity certification.

In addition to incorporating the current method for multi-site biodiversity assessment into a single method for assessing the biodiversity impacts of development (discussed in Section 3.6), the panel recommends the use of biodiversity certification be expanded, that financial support for planning authorities to complete biodiversity certification be considered and that offsets identified through biodiversity certification be secured through financial contributions to a single biodiversity offsets fund.

This means the biodiversity certification provisions in Part 7AA of the *Threatened Species Conservation Act 1995* would be repealed and replaced with reformed provisions in the proposed 'Biodiversity Conservation Act'.

Expanding the use of biodiversity certification

The panel supports biodiversity certification of specified land being applied to all forms of development, including agricultural development (where, as set out earlier, there might be sufficient intensity of proposed development to ensure that the benefits of biodiversity certification will exceed the costs). The expertise and local knowledge of Local Land Services could be used to support biodiversity certification applications for areas of proposed agricultural development. This could be done by allowing Local Land Services to apply for biodiversity certification (this is currently restricted to planning authorities).[31]

Biodiversity certification would offer more flexibility and may encourage greater uptake than was provided by multi-Property Vegetation Plans under the *Native Vegetation Act 2003*. Multi-Property Vegetation Plans have not been pursued by landholders following the difficulties experienced in the preparation of the Walgett multi-Property Vegetation Plan (Evidentiary 2014 and OEH 2014f). The panel received feedback that despite significant effort from both landholders and government agencies over a number of years, the plan was not successful and highlighted difficulties with meeting the 'improve or maintain' standard in a landscape that contained an intact endangered ecological community as well as difficulties in obtaining agreement between landholders on clearing areas, location of offsets, funding and the long term maintenance of the plan (Evidentiary 2014 and OEH 2014f).

The removal of the 'improve or maintain' standard from the assessment method and the proposal to extend the biodiversity offsets fund to biodiversity certification (discussed in Section 3.6) would provide the additional flexibility that could help overcome difficulties, such as those experienced with the Walgett multi-Property Vegetation Plan.

Significant gains could also be made by ensuring biodiversity certification is encouraged to be used for planning proposals for spot rezonings and changes to minimum lot sizes. Planning proposals are a crucial stage in the planning process as land use zonings and minimum lot sizes

[31] Section 126G of the *Threatened Species Conservation Act 1995* defines 'planning authorities' as the Minister for Planning, a local council, a determining authority, the Director-General of the Department of Planning, or any other person or body declared by the regulations to be a planning authority.

for subdivisions set expectations around the development potential of land. For example, if land is rezoned to 'residential' there is an expectation created that the land can be developed for housing. Without an upfront biodiversity assessment process, developers may only learn at the development assessment stage that there are biodiversity considerations that need to be assessed. This can lead to protracted and costly disputes (fuelled by expectations created as a result of the rezoning) that could be avoided if biodiversity issues were instead resolved at the rezoning stage. A number of stakeholders highlighted in their written submissions the need for biodiversity issues to be addressed at the rezoning stage (OEH 2014a).

A biodiversity certification scheme that is flexible enough to be used for a wide range of purposes has the potential to diffuse conflicts that occur later in the planning process and reduce excessive impacts on the environment (such as unnecessary fragmentation of important habitat).

Biodiversity certification may not be suitable for every planning proposal to rezone land or change to minimum lot sizes. This may be because the land is already cleared or constrained by other attributes such as access, servicing, contamination or flooding. The panel therefore proposes that, consistent with adopting a risk-based approach to assessing impacts of development and land use change, criteria could be developed to guide which planning proposals should apply for biodiversity certification.

Recommendation 17 – Where efficient, ensure that biodiversity certification is able to be applied to:

(a) all forms of development in both urban and rural contexts

(b) planning proposals for spot rezonings and changes to minimum lot sizes for subdivisions.

Financing biodiversity certification

Biodiversity certification can require considerable upfront financial investment by planning authorities (submissions 234, 245 & 386). Although there can be significant time and cost savings for councils and proponents at the development assessment stage, these savings may not be realised for a number of years. Upfront costs can therefore act as a disincentive for planning authorities with limited financial capacity.

To date, biodiversity certification has been funded primarily through a combination of state and local government financial contributions (OEH 2014f). In some cases, developers have commissioned reports and surveys to contribute to assessments. The Upper Hunter Strategic Assessment, which includes a landscape scale biodiversity assessment, uses a model where the mining companies that will benefit from the project have voluntarily agreed to contribute to the upfront costs of the biodiversity assessment.

In recognition of the strategic benefits of biodiversity certification to both state and local governments, the panel supports the Government investigating options for providing planning authorities with financial support to complete biodiversity certification applications. These options should consider cost recovery models, including the use of levies or administration fees at the development assessment stage.

Recommendation 18 – Investigate options for providing financial support to planning authorities to help fund biodiversity certification and explore cost recovery options to recoup costs at the development assessment stage.

Mechanisms for securing offsets

Biodiversity certification requires the preparation of a biodiversity certification strategy that sets out how conservation measures, including biodiversity offsets, will be implemented (OEH 2014f). Offsets can currently be secured in a variety of ways, including reservation of land, conservation agreements, biobanking agreements, financial contributions towards the conservation of the natural environment and zonings. Consideration should be given to aligning the mechanisms available for securing offsets under biodiversity certification with those available at a site scale.

As biodiversity certification is completed in advance of development being undertaken, there is usually a delay between the time that offset sites are identified and the time that the obligation to make a contribution arises when development is approved. Currently, there is no standard financial mechanism available to secure biodiversity offsets through the planning system at a landscape scale after impacts have been avoided and minimised as much as possible (OEH 2014f). Without a readily available mechanism, options for identifying offsets during the assessment process are limited and complex processes for transferring funds received are required within government.

To deal with these inefficiencies and encourage a robust market in environmental offsets, the panel supports the creation of a mechanism in the *Environmental Planning and Assessment Act 1979* that enables proponents of development on biodiversity certified land to pay a monetary amount reflecting their contribution to the biodiversity offset requirement. All contributions should be deposited and managed under the proposed single biodiversity offsets fund to efficiently deliver on-ground benefits above and beyond normal government conservation actions.

Recommendation 19 – Provide a mechanism for proponents to make a monetary contribution to secure offsets (e.g. developer contributions) and allow these funds to be deposited into a single offsets fund (see Recommendation 14).

4.5 Commonwealth Government recognition of the biodiversity certification process

The Commonwealth and NSW governments are currently considering opportunities to remove duplication in environmental regulation between the two tiers of government. Opportunities exist to align landscape scale biodiversity assessment processes under the Commonwealth and NSW legislative frameworks.

Strategic assessment under the *Environment Protection and Biodiversity Conservation Act 1999* allows impacts on matters of national environmental significance to be considered at a landscape level. Like biodiversity certification, strategic assessments can deal with landscape and

cumulative impacts and provide greater certainty to proponents and the community, including by taking a more coordinated approach to offsets.

There are currently four strategic assessments completed or underway in NSW. For example, a strategic assessment is being undertaken for coal mining in the Upper Hunter region. The intention is that development undertaken in accordance with the biodiversity plan prepared as part of the strategic assessment will not need to be separately assessed and approved by the Commonwealth Environment Minister under the *Environment Protection and Biodiversity Conservation Act 1999*.

Regulatory burden could be reduced if the Commonwealth conferred a strategic assessment — or bilateral agreement accreditation — on the NSW biodiversity certification process itself. This would effectively 'switch off' the need for site-based approvals under both Commonwealth and NSW legislation for all future development on biodiversity certified land.

Recommendation 20 – Seek a strategic assessment (or bilateral agreement accreditation) of the NSW biodiversity certification process under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

5. Conservation action

The protection of lands through the public reserve system is the central pillar of conservation in NSW. National parks and reserves cover an area of almost nine percent of the State (OEH 2014c). Of the 18 IBRA[32] bioregions in NSW, only four are considered to be comprehensively represented in public reserves (OEH 2014c). In 11 individual bioregions there is less than 10 percent representation and in seven of these bioregions there is less than five percent representation (OEH 2014c).

With less than 10 percent of the State within the public reserve system, and more than 70 percent of the State under private ownership or Crown leasehold, and threatened species and ecological communities occurring across all land tenures, private conservation efforts are critical to maintaining healthy, functioning and connected landscapes across NSW (OEH 2014c).

As shown in **Table 1**, to date, over three million hectares (approximately 3.9 percent of the State) is under some form of private land conservation agreement.

'Private land conversation is also recognised as an important addition to our reserve system to reverse Australia's history of extinctions'.

Landcare

'There is very little financial reward or public recognition for those landowners who choose to protect areas and implement actions beyond their perceived/or legislated level of duty of care. Private landowners who voluntarily establish land under conservation/sustainable management provide an extremely important public service, often at considerable financial cost to themselves'.

Nature Conservation Trust

[32] The national and regional planning framework for the systematic development of a comprehensive, adequate and representative National Reserve System is provided by the Interim Biogeographic Regionalisation for Australia (IBRA).

Table 1 – Private land conservation mechanisms and area protected in NSW (Source: OEH 2014c)

Conservation mechanisms	Number	Area protected (hectares)
Conservation agreements	396	146,000[33]
Wildlife refuges	678	1,936,358
Nature Conservation Trust agreements	91	24,886
Incentive property vegetation plans	1885	860,258
Registered property agreements	336	52,606
BioBanking agreements	32	4,845
Land for wildlife	1125	87,242
Indigenous protected areas	9	16,000
TOTAL		**3,128,195**

Private landholders who voluntarily establish in-perpetuity conservation covenants provide an important public good at their own cost. The importance of this commitment will grow over the coming years as development pressures increase the need for conservation to be undertaken in partnership across land tenures. While there has been effort by government as well as third parties in positive conservation action, there are several areas requiring reform.

The threatened species provisions in the current legislative framework are overly prescriptive, and have focused too heavily on planning for recovery instead of delivery of outcomes (submissions 164 & 252). This has resulted in plans taking many years to complete, and funding being diverted from achieving on-the-ground outcomes. This issue is further highlighted by the Government's recent move away from the legislative model into a modern, adaptive and prioritised programmatic approach to action on threatened species (OEH 2014c).

There is a need to better recognise the contributions some landholders already make voluntarily to conservation action on private land. This review provides an opportunity to consolidate the current mechanisms for private land conservation.

5.1 Focusing the private land conservation effort

NSW has a large number of mechanisms for private land conservation delivered by multiple parties.[34] Improved outcomes for private land conservation would be achieved if the current range of mechanisms was consolidated into fewer, but more fit-for-purpose tools. This would remove duplication and reduce government administration costs, make the available options clearer, improve incentives and reduce barriers for landholders to enter into long-term private

[33] This area includes 64,000 hectares of Australian Wildlife Conservancy reserves that are secured under a conservation agreement (the total is 64,733 hectares), 1,571 hectares of Bush Heritage reserves that are secured under a conservation agreement (the total is 17,000 hectares) and 4,609 hectares of Humane Society International Trust agreements are secured under a conservation agreement (the total is 12,962 hectares).

[34] See OEH (2014c) for more information about laws, policies and programs that provide incentives and support for conservation actions on private land in NSW.

land conservation. It would deliver more targeted on-ground conservation outcomes through provision of better support across a less disparate system.

The panel recommends the following mechanisms are provided for in the new legislation:

- biodiversity offsetting agreements
- voluntary conservation agreements
- wildlife refuges.

Biodiversity Offsetting Agreements would provide in-perpetuity security for areas of private land managed to deliver conservation outcomes and facilitate stewardship payments to landholders. These agreements would operate to secure all offsets required for site-by-site and landscape scale development, under an expanded biodiversity offsets scheme, a single offsets fund and a single method for biodiversity assessment.

Voluntary Conservation Agreements would provide in-perpetuity security for lands that landholders wish to voluntarily protect. They would consolidate the virtually identical features of two current mechanisms – Conservation Agreements under the *National Parks and Wildlife Act 1974*, and Trust Agreements under the *Nature Conservation Trust Act 2001*. The existence of two very similar voluntary conservation mechanisms has created duplication and confusion in the marketplace. There is no strong rationale to retain both programs or for government to remain directly involved in delivery. Streamlining to a single conservation covenanting mechanism and outsourcing its delivery would be consistent with NSW Commission of Audit (2012) recommendations. Outsourcing of delivery is discussed below.

Wildlife Refuges would provide a non-binding mechanism for willing landholders to protect wildlife and habitat on their properties. Wildlife refuges are currently a popular but less secure voluntary conservation mechanism and are not binding on future land owners. Wildlife refuges have value as a simple 'entry level' conservation mechanism. They can build cooperation and partnerships with landholders which may lead to a future, deeper commitment such as an on-title conservation agreement. Delivery of this mechanism should also be outsourced to a third party provider who may be better placed than government to effectively harness the goodwill and active partnership of willing private landholders.

This approach effectively consolidates all existing mechanisms into the three recommended here, with the exception of 'incentive' Property Vegetation Plans. The function of 'incentive' Property Vegetation Plans could be fulfilled in the new system by one of the recommended in-perpetuity mechanisms, or via contract based agreements with Local Land Services. Based on the evaluation of existing mechanisms, 'incentive' Property Vegetation Plans have mainly been used by Local Land Services to encourage voluntary conservation on private land in line with Catchment Action Plan investment priorities. While retaining 'incentive' Property Vegetation Plans in a new system that features the three tiers of conservation mechanisms discussed here would be duplicative and unnecessary, existing incentive Property Vegetation Plans would need to be preserved.

To give effect to the proposed changes outlined above, the new 'Biodiversity Conservation Act' would repeal the relevant parts in the *National Parks and Wildlife Act 1974, Threatened Species*

Conservation Act 1995 and the *Nature Conservation Trust Act 2001* and reconceptualise these functions in the new Act.

Interactions between different conservation mechanisms

Some stakeholders have raised concerns about the interactions between the different conservation mechanisms themselves (for example, submission 194). There is a possibility that, if there is an increase in opportunities for landholders to establish offsetting agreements that provide stewardship payments, some landholders may choose not to voluntarily conserve their land (for example, via a voluntary conservation agreement, which does not generate an income stream) for fear of missing out on an opportunity to receive such stewardship payments. This is because the principle of 'additionality', as it is currently outlined in the Biodiversity Offsets Policy for Major Projects, prevents an offset being placed on land that already has legal requirements for protection and management.

There should be an opportunity for landholders with voluntary conservation agreements in place to be able to convert this into an offsetting agreement if that opportunity presents itself. This approach would have multiple benefits including an increase in availability of offset sites, and the ability of those who currently have voluntary conservation agreements on their land to 'upgrade' their conservation efforts and begin to receive financial support and income for undertaking management actions.

While this approach may conflict with the idea of 'additionality', it should lead to better overall environmental outcomes. It will mean landholders will not be deterred from setting up voluntary conservation agreements on their land, as this will not close off their opportunity to receive stewardship payments through an offsetting agreement if the opportunity presents itself later. This should increase participation in private land conservation.

Consolidating the legal mechanisms that facilitate biodiversity conservation on private land should not prevent landholders from entering into fixed term, non-statutory contract based agreements (for example, with Local Land Services) to undertake conservation action where this opportunity presents itself. This should not, however, be in addition to a biodiversity offsetting agreement for which stewardship payments are made over the same site.

Recommendation 21 – Consolidate the mechanisms for biodiversity conservation on private land into a three-tiered system that provides proportionate incentives to landholders: biodiversity offsetting agreements, voluntary conservation agreements and wildlife refuges.

5.2 A fit-for-purpose provider

Initially at least, only one mechanism for in-perpetuity voluntary private land conservation is necessary in the NSW market. A single mechanism will reduce confusion and increase the effectiveness of delivery. Delivery would be further strengthened if carried out by an independent body with the expertise to broaden and deepen the private land conservation market, work in partnership with and support landholders to set up and maintain their

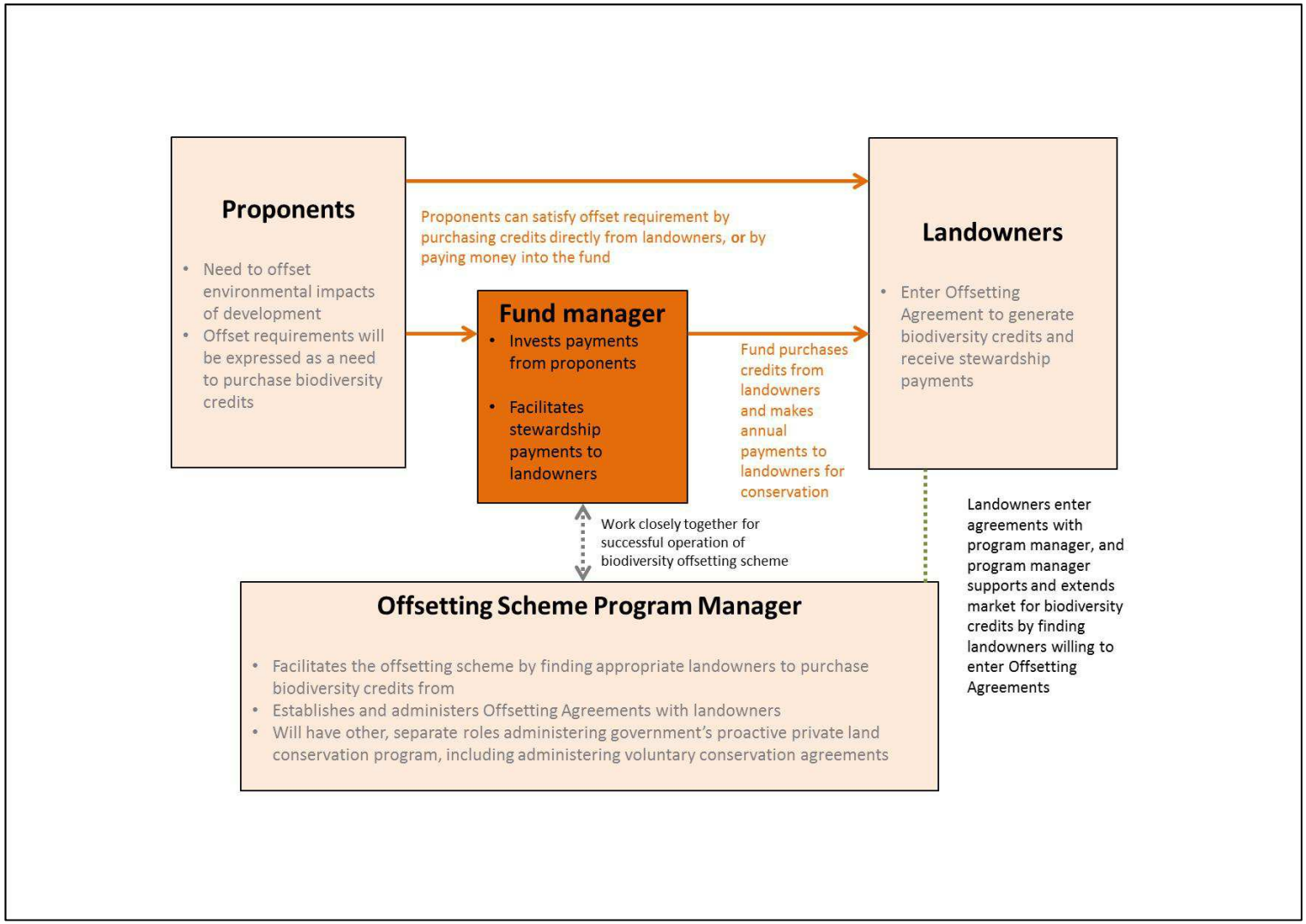
agreements, and act as a broker between development proponents and landholders in the offsets market.

Under its proposed role, the Nature Conservation Trust would administer Biodiversity Offsetting Agreements and Voluntary Conservation Agreements with landowners. The Trust would be responsible for monitoring these agreements, which should also be independently audited. This will centralise functions that have previously been spread across various government bodies, including the Minister for Environment, Local Land Services, the Office of Environment and Heritage and others. This would mean the Trust would administer a public register to show expressions of interest and availability of biodiversity credits, and work with developers and landholders as broker to set these up. The Trust's functions would be independently audited.

The panel recognises the success that the Nature Conservation Trust has achieved, as a not-for-profit conservation business, in working with private landholders to protect the biodiversity of NSW (submission 102). The Nature Conservation Trust, its independent Board and associated revolving fund, should be reconstituted in the new legislation as the Government's initial delivery arm for all private land conservation mechanisms. As the private land conservation market matures, more than one program manager could emerge or be established.

Figure 3 outlines the panel's proposal for the Nature Conservation Trust to be reconstituted as a program manager for the proposed biodiversity offsetting scheme.

Figure 3 – Operation of the biodiversity offsetting scheme and fund



The Nature Conservation Trust has the following advantages over government agencies in the administration and delivery of private land conservation. It:

- has the ability to raise its own funds via government grants, leveraging corporate partnerships and via its profile with philanthropic organisations and individuals
- has a stronger promotional presence, and conducts targeted campaigns to increase the private conservation market
- can purchase, covenant and on-sell properties with high conservation values through its revolving fund
- has fit-for-purpose expertise, governance arrangements and credibility amongst the target market (OEH 2014c).

In addition, the Nature Conservation Trust already conducts more detailed monitoring of its agreements than government agencies are able to do under its equivalent program, given current levels of funding and resources (OEH 2014c). The Nature Conservation Trust provides more hands-on support to landholders in setting up agreements and has greater capacity to be 'on the ground' with landholders. Outsourcing delivery of private land conservation mechanisms to the Trust would allow government to shift resources and effort away from monitoring individual agreements. The Government would instead need to ensure the Trust is adequately resourced and supported to perform its functions.

The Government's role could then be focused on long-term strategy development for private land conservation in NSW. The Trust will need to consider how these private land conservation mechanisms contribute to whole of landscape conservation of biodiversity in New South Wales. It should be required to provide strategic plans that identify the voluntary conservation and investment priorities in each region. Such plans should be informed by the statewide prioritisation mechanism developed by government and should have Government sign-off.

This proposal would remove duplication and uncertainty while delivering NSW Commission of Audit (2012) recommendations towards local delivery, devolution of government programs, reduced duplication, transparent environmental priorities, improved collaboration and reduced red tape.

The *Nature Conservation Trust Act 2001* would be repealed. A new part reconstituting the Nature Conservation Trust and outlining the roles and responsibilities of the Trust would be included in the proposed 'Biodiversity Conservation Act'. The panel proposes that the Government consider, subject to further legal and governance advice, if the NCT should be reconstituted under either the *State Owned Corporations Act 1989* or the Commonwealth *Corporations Act 2001* so that its directors can be subject to appropriate accountabilities for their role.

Recommendation 22 – Outsource the administration of all private land conservation mechanisms to a third party program manager for private land conservation and reconstitute the Nature Conservation Trust to perform this role initially, established under either the NSW *State Owned Corporations Act 1989* or the Commonwealth *Corporations Act 2001*.

5.3 Prioritising private land conservation

One of the primary objectives of biodiversity conservation on both public and private land is to help build a protected area system that is comprehensive, adequate and representative (a 'CAR' system). This is consistent with Australia's international and national biodiversity obligations[35], and with the National Reserve System's scientific framework (Commonwealth of Australia 1999) to ensure Australia progressively extends effective protection to examples of all our ecosystems.

There is currently no overarching framework or strategy that guides prioritisation of effort in building a private land conservation network (submissions 41, 42 & 44). The Nature Conservation Trust uses its five-year business plan to guide its effort, as it must set out the conservation priorities of the Trust as well as the criteria used for identifying land that is appropriate for acquisition. In setting these priorities, however, the Trust relies to some extent on the conservation priorities identified by the Government.

A more strategic and integrated approach to guide biodiversity conservation efforts on private land, the protected areas system and Crown land (such as travelling stock reserves) will provide for better connectivity and is expected to result in stronger and more effectively focused biodiversity outcomes. The approach should be dynamic and adaptable over time.

There is value in all land conservation providers working towards a single spatially expressed vision for a network of private and public land conservation in the future. This would focus conservation effort and resources to those areas that will contribute best to these overall objectives. A number of stakeholders expressed a view that investment needs to be strategically guided (submissions 155, 325 & 339). The panel considers that the Great Eastern Ranges initiative is a good example of a coordinated and strategic approach to conservation at a landscape scale. The panel also considers that some travelling stock reserves provide an important resource in maintaining connectivity across the landscape. High-conservation value travelling stock reserves should be maintained to prevent the current network from being broken and connectivity lost.

A statewide framework or strategy for biodiversity conservation on private land should be developed that:

- takes into account the public reserve network, including other Crown lands such as travelling stock reserves, and representativeness of threatened ecosystems
- includes a register of private land managed for conservation purposes to help government and the community better understand the contribution of private land conservation to biodiversity conservation across NSW

[35] These obligations arise from the *UN Convention on Biological Diversity* (1992), the *Rio Declaration on Environment and Development* (1992), the *Convention on the Conservation of Migratory Species of Wild Animals* (1979), the *International Convention on Wetlands of International Importance* (1971) and the *International Convention for the Regulation of Whaling* (1946).

- takes into account landscape features identified as important for biodiversity adaptation to climate change
- includes a mechanism for accounting for private land conservation consistent with the International Union for Conservation of Nature protected areas categories system.

The strategy should be developed in consultation with the community and relevant government agencies including Local Land Services to ensure that local knowledge and intelligence is taken into account and the strategy is well-integrated with boarder regional planning processes.

A statewide prioritisation mechanism will enable the setting of long-term priorities over and above those already set by the Nature Conservation Trust's five year business plan. To this end, the panel understands that OEH has commenced preparation of a five-year strategic plan for private land conservation (currently anticipated to be completed in 2015). OEH should ensure that the issues identified above are addressed through this strategic plan and adapted over time.

While prioritisation efforts are useful to guide government and third party brokers as to where they should encourage participation and direct effort for the best outcomes, they should not result in hard barriers to participation by all landholders interested in making a voluntary contribution.

Recommendation 23 – In consultation with local communities and government agencies including Local Land Services, develop a statutory statewide prioritisation mechanism that establishes a single spatially expressed vision for a network of private and public land conservation to:

(a) map all areas where biodiversity is currently protected on public and private land, and make this information publicly available

(b) guide investment in biodiversity conservation on private land.

The prioritisation mechanism should include criteria for prioritisation such as maintaining or establishing connectivity across the landscape and improving protection of good samples of the least protected ecosystems.

5.4 Prioritising species recovery and threat management

As with private land conservation, resources to address our threatened species and ecological communities are not infinite. The Saving our Species program[36] takes a contemporary approach to the planning and implementation of conservation action for threatened species based on prioritising actions that can achieve the best outcomes most cost effectively.

[36] More information on the Saving our Species Program is available on OEH's website at <http://www.environment.nsw.gov.au/savingourspecies/about.htm>.

Saving our Species provides a sound basis for integrating and modernising the provisions for species recovery and threat management. The current provisions take an overly prescriptive approach to planning and delivering conservation action.

Parts 4, 5 and 5A of the *Threatened Species Conservation Act 1995* that deal with recovery plans, threat abatement plans and the Priorities Action Statement would be repealed. A new part that modernises the Priorities Action Statement to reflect the approach taken by Saving our Species would be established in the proposed 'Biodiversity Conservation Act'.

Formalising the adaptive management approach taken by Saving our Species would achieve greater efficiency, build on the knowledge gained during the first decade of the Act's implementation, and facilitate on-the-ground outcomes more rapidly and measurably.

The features of the program that make it a model that should be maintained and built upon are:

- making monitoring and reporting mandatory for funded projects
- increasing transparency by publishing results from monitoring
- specifying location, timing and costs for all actions
- introducing a greater focus on community and cross-sector engagement and partnership
- organising species into management streams to ensure species get the management they require (not all species require site-specific management actions)
- creating projects that contain all actions required to meet an objective
- prioritising projects for government investment, rather than individual actions
- providing an avenue for funding species projects that may not be particularly cost-effective but have a high value to society (iconic species).

Protecting species by addressing threats in the landscape

Many of the actions under Saving our Species address threats within the landscape that are a problem for multiple species. These management actions could be duplicating effort directed at specific threats identified in formal Threat Abatement Plans.[37] While Threat Abatement Plans play an important role in guiding action to address threats, consideration should be given to reviewing and aligning management actions in Threat Abatement Plans to ensure they are complementary to those under Saving our Species, and to prioritising threat abatement actions that have benefits to the most species. In addition, recognising that there are multiple threats operating at any one time, the listing of key threatening processes does not facilitate additional threat management over and above what the Saving our Species approach can achieve.

[37] More information about Threat Abatement Plans is available on OEH's website at: <http://www.environment.nsw.gov.au/threatenedspecies/ThreatAbatementPlans.htm >.

The Saving our Species program should also be extended to address listed ecological communities as a matter of priority, which the panel understands is already being progressed.

Recommendation 24 – Design a legislative framework for action on threatened species and ecological communities that formalises the programmatic approach taken by Saving our Species, and which:

(a) streamlines and removes duplication in existing requirements for recovery planning, threat abatement and priorities action statements

(b) focuses on outcome monitoring and prioritisation of investment rather than prescriptive legislative provisions.

5.5 Protecting areas of special biodiversity importance

Current provisions in NSW for critical habitat identification are rarely utilised. This is also the case in Australian jurisdictions with similar provisions (ANEDO 2014 & OEH 2014d).[38]

The panel recognises the importance of looking after habitat that is critical to the survival of threatened species, populations and ecological communities. However, the current 'critical habitat' concept has a narrow focus – to protect the critical habitat of those species, populations and ecological communities that are listed as 'endangered'. As submission 169 noted (p. 6):

> One of the deficiencies in current biodiversity conservation measures is the limited ability to apply some form of protection to individual sites. There is no equivalent of the UK Site of Special Scientific Interest classification …

To support healthy and resilient landscapes there is a need to look beyond threatened species and ecological communities. There is value in reconceptualising the notion of critical habitat to provide for the identification of areas of special importance. The UK Sites of Special Scientific Interest provides a useful model.[39]

These areas would not necessarily be limited to their value in protecting the sites where threatened species and ecological communities currently occur (submission 49). Other interests may include species diversity, climate refuges, connectivity and supporting migratory species. Designating such areas would provide vital information to decision makers and the community about where important areas are located and help to prioritise conservation action.

The panel envisages that the identification of such areas would be infrequent. Managing the impacts of land use change and development should generally remain within the remit of the planning system. However, there will be instances where habitat is of vital importance to the survival of threatened species. Examples of areas of special importance might include the last

[38] NSW has only identified four critical habitat sites to date. No areas of critical habitat have been declared in Tasmania, Queensland and the Northern Territory and only one has been made in Victoria (OEH 2014d).

[39] More information about UK Sites of Special Scientific Interest can be found on the UK Government website at: <https://www.gov.uk/protected-or-designated-areas>.

known occurrence of a threatened species, the location of a threatened community that is below one percent of its original extent, or a location that contains an unusually rich combination of threatened species. The Minister for the Environment should be able to protect such areas and to provide the necessary resources to ensure their management in perpetuity.

The critical habitat provisions in Part 3 of the *Threatened Species Conservation Act 1995* would be repealed. A new part would be included in the proposed 'Biodiversity Conservation Act' to provide for the identification and management of areas of special biodiversity importance. The new 'Biodiversity Conservation Act' should establish a power for the Minister for the Environment to declare areas of special biodiversity importance. The selection of sites would be subject to detailed evaluation against scientific criteria. Notification would be given to all the owners or occupiers of the land which is considered to be important habitat. Owners and occupiers would be able to make representations (including objections) about a proposed notification. The declaration may include a list of operations likely to damage such areas and which require particular land management practices or approval.

In identifying areas of special importance, the focus should be on stewardship activities rather than regulation, with positive management of sites supported with appropriate incentives. The Minister for the Environment should be required to enter into a management agreement with the landholder(s) to provide stewardship payments for any opportunity costs and ongoing conservation management requirements imposed by the Minister.

Some currently listed threatened ecological communities may be more appropriately designated under this type of new framework (for example, the shorebird community occurring on the relict tidal delta sands at Taren Point). After identifying an area of special biodiversity importance, it will be necessary to identify a person or organisation responsible for its care and maintenance and to arrange suitable long-term funding.

Recommendation 25 – Replace the current and little-used mechanisms for critical habitat identification with stronger provisions to maintain, conserve and restore areas of 'special biodiversity importance'.

5.6 Investing in conservation action

A number of stakeholders have highlighted the need for additional resources to address current barriers to participation and enable conservation programs to be successful (submissions 73, 155 & 234).

The terms of reference for this review asked the panel to identify reforms that will cut red tape, support sustainable development and especially to facilitate the effective conservation of biodiversity.

The reforms proposed in Section 3 of this report will reduce the regulatory burden for landholders in ongoing land management and will facilitate sustainable development by moving to taking economic, environmental and social impacts into account in land use planning and development approval processes for all forms of development.

The biodiversity certification and offsetting schemes will work within the planning system to facilitate sustainable development. However, these mechanisms may at best only achieve no net loss of biodiversity over the longer term at bioregional and statewide scales (and likely some gradual incremental loss of biodiversity).

To ensure that the terms of reference are met with respect to biodiversity conservation, the panel has proposed that an object of the new legislation should be to 'conserve biodiversity at bioregional and statewide scales'.

To ensure biodiversity is conserved at these scales over time, the Government will need to invest adequately in positive conservation action. The panel therefore recommends that the Government consider supplementing voluntary and market-driven private land conservation activity with direct government investment in additional positive conservation effort. This should include an emphasis on restoration and rehabilitation, where feasible, in areas of the state where biodiversity values are degraded.

Any direct investment in the private land conservation market and the Saving our Species program should be strategic, with priority being given to programs and areas that generate the greatest environmental benefits.

Investing in payments under biodiversity offsetting agreements

Payments to landholders who enter into biodiversity offsetting agreements will provide meaningful compensation to landholders for the lost opportunity to otherwise develop that portion of their land, as well as annual management payments to improve the biodiversity at the site. By placing a value on biodiversity in this way, as is currently done by the relatively recent market-based biobanking scheme, the agreements have significant potential to improve the quality of conservation management on private lands, integrate conservation with agriculture and to provide reliable, long term financial support to private landholders undertaking conservation activity (submissions 45, 46 & 325).

In the short to medium term, it is likely that funding created by the market for offset agreements — which will be invested in private land conservation via payments to landholders — will be focused in areas of the State where there is development demand. However, this will not be adequate to build a comprehensive network of conserved private land across the state. Supplementary government investment will therefore be required to support conservation action on private land in bioregions where the offsets market is not driven by demand and where biodiversity needs to be conserved.

To fully realise the private land conservation necessary to achieve desired outcomes at bioregional and state scales, it will likely be necessary to drive private conservation action through direct investment by the Government. This could be facilitated via stewardship payments to landholders made from the offsets fund under agreements administered by the private land conservation program manager. Government could commit an annual direct contribution to the fund which the program manager would expend in line with a statewide investment strategy.

Investing in voluntary conservation agreements

Based on the evaluation of current voluntary conservation mechanisms (OEH 2014c), it is clear that there has historically been a range of ad hoc funding and incentives available under these types of agreements. Availability of funding has fluctuated and acted as a barrier to voluntary, in-perpetuity participation in conservation action.

A renewed commitment from Government is needed to reduce this barrier and appropriately acknowledge the public good that is done by landholders who voluntarily manage parts of their land for conservation, often at personal cost and reduced land productivity (submissions 95, 185, 238 & 280). An annual grants program complemented with a one-off establishment payment to landholders, which is similar to programs run in other states, could be a suitable model.

Investing in Saving our Species

One of the key aspects of the Saving our Species program that will contribute to its success is that it operates to ensure that government funding (which will change over time) will always be invested to maximise outcomes. Improvements in conservation large enough to achieve positive changes to listing status, let alone full species recovery, are often difficult and costly, require long time periods, and are very rarely achieved in practice. For these reasons, the Saving our Species program aims to 'maximise the number of threatened species that can be secured in the wild in NSW for 100 years'. To achieve this goal, site-managed species projects specify the minimum actions at a minimum number of sites that are needed to ensure a species will be viable in the wild for 100 years. By identifying a minimum set of actions and sites, additional funds can be freed to secure more species.

While this approach will work to maximise biodiversity conservation outcomes from any level of available resourcing, the current level of NSW Government investment is only enough to secure 19 percent of species that need to be site-managed in NSW (OEH 2014c). From 2015 the Environmental Trust will provide an additional $10 million over six years for the Saving our Species program via a competitive grants program. While this is a significant increase, the Government should consider increasing its base level commitment to the program to ensure more species are secured in the wild.

Recommendation 26 – Consider additional investment in positive conservation action, including:

(a) additional direct Government investment, via the Nature Conservation Trust, for stewardship payments to landholders who enter into Biodiversity Offsetting Agreements to establish a network of private land conservation (to complement market-driven investment)

(b) Government support, via the Nature Conservation Trust, in the form of an annual grants program and one-off establishment payments to landholders who enter into Voluntary Conservation Agreements

(c) increased funding to the Saving our Species program to increase the number of threatened species secured in the wild.

6. Managing wildlife interactions

The NSW Government has regulated human-wildlife interactions for many years for a variety of social, economic and environmental reasons. Each Australian state and territory government intervenes in the management of wildlife as a result of strong community expectations around protecting people and livelihoods, as well as the need to protect our unique native plants and animals for future generations.

The primary mechanism for managing interactions with wildlife in NSW is provided by the *National Parks and Wildlife Act 1974* (parts 7, 7A, 8, 8A and 9) and the associated National Parks and Wildlife Regulation 2009. The wildlife provisions in the *National Parks and Wildlife Act 1974* remain largely unchanged since its commencement 40 years ago.

The basic approach to regulating human-wildlife interactions remains one of prohibition and prescription: interactions (taking, trading, keeping, moving, killing or harming) are banned unless otherwise permitted, generally via a licence. There are 12 different licences under the *National Parks and Wildlife Act 1974* and each type of licence contains a range of different conditions that must be complied with. Compliance with these conditions and the ability to enforce them is highly varied.

This highly regulated approach reflects the origins of the *National Parks and Wildlife Act 1974* which was aimed at sustainably managing wildlife use. However, the legislation has not kept pace with the evolution of wildlife management in practice, which has seen a significant increase in the keeping of native animals as a hobby, expansion of the commercial wildlife industry, and a growing need to manage human-wildlife interactions as a result of urban and rural population growth.

As an example of the growth in popularity of native animal keeping, in the mid-1990s, OEH's predecessor agencies licensed approximately 1,000

'There is a definitive role for the government in ensuring the welfare of individual native animals in addition to laws such as the *Prevention of Cruelty to Animals Act 1979*.'

NSW Wildlife Council Inc.

'This legislation [*Part 7A of the National Parks and Wildlife Act 1974*] is comprehensive and up to date. ORRCA submits that any review of the legislation should take particular care to maintain the level of protection for fauna that is currently provided for in the Act and Regulations.'

Organisation for the Rescue and Research of Cetaceans in Australia

individuals to keep native animals as a hobby; today there are around 20,000 licensed native animal keepers and an unknown number of unlicensed ones. OEH also licenses 28 wildlife rehabilitation groups across NSW (OEH 2014g).

Growth in all aspects of the management of human-wildlife interactions coupled with the lack of reforms to the regulatory approach has led to an overly prescriptive licensing system that is difficult to enforce. The system fails to adequately differentiate between low and high-risk activities, and between individual and commercial pursuits. For example, a person who keeps two pet reptiles has the same licensing requirements as a person who runs a home business breeding and selling hundreds of reptiles.

The majority of submissions stated that there remains a role for government in native animal welfare and conservation, highlighting the community's expectations that native plants and animals will be protected by biodiversity legislation (submissions 56, 57, 112, 123, 124, 132, 135, 145, 178, 287, 288, 291, 297, 304, 344 & 360). In that context, many submissions also raised that while there is a significant amount of wildlife management regulation, it is overly complex and bureaucratic and is not adequately resourced for compliance and enforcement (see submissions 116, 194, 261, 290, 339 & 345).

The panel considered the issues identified in an evaluation of the Government's legislative and policy approach to wildlife management (OEH 2014g). The panel also considered issues raised by stakeholders in written submissions and meetings.

6.1 A risk-based regulatory approach

A risk-based approach to regulating people's interactions with wildlife would see the introduction of a tiered assessment and approval system under the proposed 'Biodiversity Conservation Act'. Relevant parts (including parts 7 to 9) of the *National Parks and Wildlife Act 1974* would be repealed.

Activities would fall into the categories of**:**

- exempt (no assessment, licensing or ongoing compliance required)
- complying (with legislative provisions, schedules and/or codes of practice and therefore not requiring assessment or licensing)
- assessable (assessed and licensed according to risk)
- prohibited.

A range of current renewable licences should be discontinued, with these activities becoming categorised as either exempt or complying, based on the risks involved.

Exempt activities could include keeping a limited number of certain low-risk native animals (for example, certain birds) as pets. Certain species would be considered low risk because their welfare requirements are easy to meet, they are abundant in captivity and in the wild, and have been widely kept as pets for a long time. These native animals would be listed on a legislative schedule.

Complying activities would include keeping a limited number of native animals as pets (for example, a pet reptile, amphibian or mammal of a certain species). Codes of practice would set out the native animal welfare requirements and basic compliance requirements. A threshold would be set to determine the number of native animals that could be held before the activity was deemed assessable rather than complying. Relevant species would be listed in a legislative schedule. It is estimated that under the proposed system of exempt and complying activities, licences, fees and record keeping would be removed for approximately 20,000 people in New South Wales (OEH 2014g).

Within the assessable category, activities would be grouped to allow for differential regulation so that varying levels of risk can be appropriately managed. Licences (both one-off and renewable with a variety of conditions) may be required.

Assessable activities would include large scale commercial wildlife breeding or native wildlife harvesting operations (such as fauna dealers, including pet shops selling native wildlife, breeders who trade native animals for profit, and commercial kangaroo harvesters). This would effectively separate these activities from much smaller scale animal keeping activities, which would become complying activities. Assessable activities would also include wildlife rehabilitation because these activities require specific skills, equipment and techniques and often involve handling of sick and/or dangerous animals that can pose a risk to human health and safety, or handling of species that are threatened.

Prohibited activities would include keeping animals such as certain exotic species, marine species, and dangerous species except as an authorised commercial activity (such as a crocodile farm, snake handler, or animal exhibitor).

A tiered system of regulation will require regulatory tools that are tailored to the activity and desired outcome. The current approach to wildlife management in NSW is almost solely based on licensing, and compliance is highly varied. Many licence conditions are burdensome and are not suited to the activity being regulated because one licence type is used for a broad range of activities (for example, a small scale animal keeper is regulated in the same way as a commercial breeding enterprise).

It is proposed that for activities categorised as complying, licensing will no longer be required. People undertaking these activities will need to comply with standards set out in legislation or in enforceable codes of practice. This approach will have multiple benefits, including:

- animal keepers will have a clear understanding of animal keeping requirements and minimum standards, meaning regulatory instruments act as welfare and education tools as well as compliance tools
- regulators will have the option of issuing directions to comply with standards in the first instance, rather than issuing fines as a first response, providing a graduated approach to offences and reflecting the relatively low-risk nature of complying activities.

The significant reduction in the number of small-scale licences that will be achieved by adopting the complying activities category will also enable the Government to concentrate enforcement

efforts and more effectively regulate higher-risk activities. This would be supported through legislation that provides tiered offence provisions with penalty amounts reflecting the degree of risk to native animals.

Recommendation 27 – Adopt a tiered and risk-based approach to the regulation of wildlife management in NSW to credibly regulate high-risk activities and reduce red tape for low-risk activities. The four tiers would be: exempt activities, code-based complying activities, assessable/licensed activities, and prohibited activities.

6.2 Education, engagement and community partnerships

Increased community knowledge and understanding of our unique native plants and animals increases the likelihood that people will voluntarily comply with regulations to manage wildlife interactions. It is also likely to increase people's desire to protect and ensure positive welfare outcomes for wildlife.

Improve the knowledge and understanding of wildlife conservation and management

The introduction of a tiered approach to wildlife regulation and the removal of licences for lower-risk activities will allow more people to experience and enjoy native animals. Keeping native animals as pets is a legitimate pastime valued by the community and is already occurring on a significant scale. However the panel acknowledges that the needs of native animals vary as does the capacity of people to provide adequate care.

The effectiveness of government's regulatory role would be greatly increased if underpinned by better resourced community-oriented programs that educate and inform people about the conservation needs of native plants and animals, the impacts of human-wildlife interactions, and, at an individual animal level, the welfare and care needs of animals in captivity.

Community-oriented programs that will support a modernised regulatory approach would feature:

- more explicit and user-friendly information about native animal care
- clear minimum standards for compliance across all categories of regulation
- more effective and increased information about wildlife management, including an increased and improved online presence(for example through a wildlife management 'portal' on the OEH website)
- dissemination of information through networks such as pet shops, wildlife breeders and wildlife rehabilitation providers.

Effective community-oriented programs would have multiple benefits including:

- reduced administrative costs to government through increased willingness by participants to comply with regulatory approaches, allowing government to focus compliance efforts on higher-risk activities
- reduced welfare risks for native animals by improving knowledge of animal care practices

- improved conservation outcomes by raising awareness of the risks posed to wild populations by native animal poaching for private keeping, and disease risks to wild populations from release of captive animals.

Recommendation 28 – Improve the public's knowledge and understanding of wildlife conservation and management through community-oriented education programs about native plants and animals, the impacts of human-wildlife interactions, and the welfare needs of animals in captivity.

Facilitate effective local wildlife care through strategic partnerships with wildlife rehabilitation providers

As a result of increased urban growth and development, human-wildlife interactions continue to increase. Urban encroachment on wildlife habitat leads to high numbers of animals being injured on roads and by domestic cats and dogs. Animals such as birds and bats are regularly entangled in overhead wires and backyard fruit tree netting, and pet native animals become sick as a result of incorrect or inadequate care. In such instances, wildlife rehabilitation providers receive animals and provide specialised care and treatment with the aim of releasing rehabilitated wild animals where appropriate, or rehoming pet animals that have been seized or surrendered.

There is a strong expectation from the community that the service provided by wildlife rehabilitation groups to sick or injured individual animals is valued and maintained. This is demonstrated by the profile of groups such as NSW Wildlife Information Rescue and Education Service Inc. (WIRES).

Wildlife rehabilitation providers play a role in maintaining viable populations of native animals, particularly in regions where habitat or species may be declining because of human activities. Rehabilitation providers also play a role in natural disasters and emergency situations that significantly impact native wildlife, such as bushfires and pollution incidents.

The panel heard from several state-level organisations representing wildlife rehabilitation providers who demonstrated the commitment made by members, employees and volunteers in providing this service to wildlife and the community. It is clear that this commitment involves significant financial and human resources and specialist expertise, much of which would not be able to be provided by government if these groups ceased to operate.

Recognising that wildlife rehabilitation activities carry a higher risk than basic pet animal keeping, the panel recommends these activities continue to be regulated – within the proposed category of 'assessable' activities – meaning rehabilitation providers would need to be approved to operate. This reflects the specialist expertise needed to provide care for a range of native species, and that providers may be required to deal with dangerous or sick animals that pose a risk to human health. They are also required to have appropriate equipment and ensure welfare standards are met for a greater number of native animals than in basic pet animal keeping.

The majority of wildlife rehabilitation providers are equipped with the specialist skills necessary to provide this service, and comprehensive and credible training is generally provided to local groups by state-level organisations (such as WIRES and the NSW Wildlife Council).

The Government should facilitate more effective wildlife care through strategic partnerships with wildlife rehabilitation providers. This could extend to accrediting peak bodies or representative organisations, rather than licensing individual wildlife care providers. Under such partnerships, the Government's role would be setting consistent, statewide standards for operation, supporting the function of local groups by providing assistance in conflict resolution, facilitating statewide training and education, and undertaking targeted compliance. The wildlife rehabilitation providers' role would be to deliver on-ground services, ensure members and volunteers comply with standards, and to provide data to government to foster continuous improvement and monitor wildlife trends statewide.

The approach should feature:

- clear guidelines about the regulatory approach guiding wildlife rehabilitation providers, including minimum standards or codes of practice against which providers would be assessed for approval to operate
- clear guidelines for resolving conflicts
- redirection of government resources from monitoring individual rehabilitation providers' activities to facilitating key aspects of the partnership model such as ensuring consistent training, compliance with standards and codes of practice.

Recommendation 29 – Facilitate effective local wildlife care through strategic partnerships with wildlife rehabilitation providers.

6.4 Conservation of marine wildlife

While the NSW Government is only responsible for regulating interactions with marine mammals that occur in NSW waters, most marine mammals are highly migratory and move across the boundaries of state and Commonwealth waters. For this reason it is critical that any regulatory approach for marine wildlife is nationally consistent.

To support this, the robust yet community-oriented regulation of interactions with marine mammals remains warranted. Increasing public interest in marine mammals has led to the rapid growth of commercial whale, dolphin and seal watching. There has also been considerable growth in land-based whale watching from coastal national parks. This growth has been encouraged through OEH's community campaigns such as the 'Wild About Whales' outreach program, which provides tips and guidelines about whale watching in NSW.

Human activities such as increasing coastal development, fisheries activities, vessel strike and marine pollution all continue to seriously impact marine wildlife, causing injury and sickness. The panel notes with concern that a number of incidents involving marine mammals occur each year, such as whale and dolphin strandings or pollution spills, and these tend to be high profile and generate large amounts of media and public attention.

Part 7A of the *National Parks and Wildlife Act 1974* contains the current provisions for managing human interactions with marine wildlife in NSW. This part of the legislative framework is much more recent than the non-marine wildlife provisions contained in Part 7, 8, and 9 of the Act. In addition, the National Parks and Wildlife Regulation 2009 reflects current best practice approaches to the management of marine wildlife and is consistent with national and other state frameworks – such as the Commonwealth Government's national guidelines for whale and dolphin watching (Department of the Environment and Heritage 2006).

The legislative provisions of Part 7A from the other wildlife provisions in the Act are contemporary and more effective because they are underpinned by a robust policy framework that guides OEH in implementation. OEH's marine fauna program is an umbrella approach that contains clear guidelines or procedures for all aspects of marine fauna interactions from emergency management and incident response to training of volunteers and engaging the community in conservation activities.

The regulatory and policy framework for managing marine fauna is a good example of the full spectrum of tools being applied from prescriptive (such as the Regulation) to the educative and engaging (whale counting volunteer programs). Internal guidelines and procedures help staff navigate operational issues such as marine strandings or oil spills in partnership with other organisations. Licensing is used effectively to regulate activities that pose risk (such as tourist vessels approaching marine mammals at sea).

The panel recommends that this model is maintained in a future legislative and policy framework and further examined for adaptation and application to non-marine wildlife management.

7. Knowledge, information and science

Information is a cornerstone for effective decision making. It is fundamental to understanding the threats to biodiversity, how biological systems function and how these systems are affected by pressures. In addition, we need to have meaningful measures of what biodiversity we have, how threatened it is and the effectiveness of conservation efforts (at local, regional and landscape scales).

There is a broad understanding of the range and relative importance of threats to biodiversity in NSW. There is also broad knowledge of which plants and vertebrates are most threatened and what measures are needed to help conserve them. However, there is a need to better link knowledge and science to policy challenges and on-ground action. Data, information and knowledge need to be applied to problems facing biodiversity to inform planning decisions and conservation actions.

The legislation under review currently has an important but narrow focus on identifying threatened species, populations, ecological communities and key threatening processes. It does not adequately provide for broader monitoring, evaluation and reporting. For the effective conservation of biodiversity, data and information are needed to inform:

- extinction risk assessment for species and ecological communities
- threat and risk assessment to prioritise actions to ameliorate threats across the landscape
- tracking biodiversity status across NSW
- understanding the values of biodiversity to the community
- predicting and modelling the impacts of different actions
- reporting on the outcomes of actions to conserve biodiversity.

All of these elements are essential for an adaptive management approach.

'Data currently collected on biodiversity in NSW is vital and should be maintained; however the lack of detailed data on the value of protecting biodiversity in NSW is a serious deficiency'.

Environment Liaison Office

'The state of NSW mapping and data with regard to biodiversity is inadequate. This is the cause of uncertainty for developers and farmers, considerable delay in assessment and undermines the aims of the Offsets Policy to streamline the offsetting process and reduce negotiation'.

NSW Minerals Council

Adaptive management systematically integrates results of management interventions to iteratively improve management (McDonald-Madden et al. 2010). It is a structured process for learning about which management actions are most effective at achieving specified objectives. Adaptive management involves setting clear objectives, developing an understanding of the threats and processes that may impact the objectives, and how management actions may act to alter relevant threats or processes. Planned management actions are then implemented as experimental treatments (Williams 2011), with rigorous monitoring and evaluation of the results, and feedback of information into future management decisions.

7.1 Improving data collation and sharing

Many stakeholders have noted that information about biodiversity comes from a variety of sources — fauna and flora surveys, long term biological monitoring programs, development impact assessment, scientific research, land use planning processes, threatened species listing processes and volunteers — but that this data is often not collated, shared or used effectively by decision makers (submissions 130, 141, 148, 234 & 345).

The panel also heard that substantial data is collected through volunteer involvement, more than could be achieved by governments and scientific institutions alone. This information helps improve understanding about biodiversity and should be encouraged (submissions 44, 49 & 269).

There is no overarching strategy in place that ensures the collation and retention of information, particularly data collected in the course of undertaking regulatory impact assessment and other statutory processes (for example, threatened species listings, land use planning, recovery and threat abatement action). A single on-line portal could provide easy access to biodiversity information for land managers, planning authorities and other decision makers.

The panel notes the recommendation of the NSW Chief Scientist and Engineer that 'Government commission the design and establishment of a Whole-of-Environment Data Repository for all State environment data' (Chief Scientist and Engineer 2014, p. 13).

Recommendation 30 – Better harness data collection efforts and make this data available to the public as part of open government through a whole of government biodiversity portal.

7.2 Extinction risk assessment for species and ecological communities

NSW Scientific Committee

Whether a species or ecological community is at risk of extinction is and should be a matter of science: this is consistent with internationally accepted best practice. In most countries with biodiversity legislation and in the Commonwealth and all states and territories (excluding the Northern Territory), expert scientific bodies have been established to assess the conservation status of species (OEH 2014h).

The NSW Scientific Committee, established under the *Threatened Species Conservation Act 1995*, is the appropriate expert body for evaluating and determining the conservation status of species,

populations and ecological communities. This view is shared by a number of stakeholders (submissions 23, 40, 130, 148, 213, 249 & 379).

The proposed new 'Biodiversity Conservation Act' should ensure that the listing process continues to be scientific and independent of politics and social and economic considerations. The assessment of environmental, social and economic impacts is best dealt with through development approvals and land use planning processes (discussed in Sections 3 and 4). Similarly, the listing process should be separate from the process for setting priorities for conservation action, which should have regard to the cost and feasibility of recovery (discussed in Section 5).

Listing categories and assessment criteria

The current criteria for determining species at 'risk of extinction' are based on the International Union for Conservation of Nature Red List Categories and Criteria for threatened species (IUCN 2012). The criteria are prescribed in the Threatened Species Conservation Regulation 2010 and are supported by guidelines for interpreting the criteria (NSW Scientific Committee 2012). The guidelines draw extensively from relevant material in the International Union for Conservation of Nature Red List Guidelines (IUCN 2014).

At the time of making the Threatened Species Conservation Regulation 2010, the International Union for Conservation of Nature had no listing criteria for ecological communities. The International Union for Conservation of Nature has recently established a scientific framework that can be used to assess the conservation status of ecological communities.[40] The listing criteria and categories under the proposed 'Biodiversity Conservation Act' and any associated regulation should align with those of the International Union for Conservation of Nature.

Recommendation 31 – Align NSW listing categories and assessment criteria for threatened species and ecological communities with those of the International Union for Conservation of Nature and review supporting guidelines.

Maintaining accurate and representative lists

The panel has observed that substantial effort goes into the listing process. However, as stated by the Environmental Defenders Office:

> The current lists are not truly representative of the flora and fauna that is vulnerable or endangered in NSW. The TSC Act [Threatened Species Conservation Act 1995] listing process generally shows considerable bias towards mammals, birds, and other iconic species. Consequently, there are substantial gaps in representation on lists under the Act, particularly in relation to insects, invertebrates and fungi. Due to this bias, as well as time lags and lack of knowledge, many species at risk of extinction may not be currently listed (EDO NSW 2014, p. 25).

[40] More information about International Union for Conservation of Nature Red List of ecosystems is at available at <http://www.iucnredlistofecosystems.org/>.

As observed by the Port Macquarie-Hastings Council (submission 235), the listing process is too reliant on the public making nominations. More emphasis should be placed on maintaining accurate lists by initiating listing action (including removing items) rather than relying on public processes.

Greater flexibility should be given to the NSW Scientific Committee under the proposed 'Biodiversity Conservation Act' to determine priorities for public nominations. The process under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* for setting themes provides a model that could be adapted to enable the NSW Scientific Committee to make more strategic decisions about which nominations will be considered over specified periods.

The process would allow the NSW Scientific Committee to call for nominations under a particular theme. These could include the assessment of taxonomic groups, emerging threatening processes, or availability of new information on species and ecological communities. Nominations received under such a theme would be placed on a priority assessment list and the Committee's work program set accordingly.

Despite the efforts of the NSW Scientific Committee to undertake regular reviews of the lists, maintaining up-to-date the lists continue to be a challenge. As pointed out by stakeholders, it is important that lists are accurate and subject to regular review (submissions 40, 391, & 393). The panel is of the view that errors in the lists undermine their credibility, giving cause for criticism of the listing process and the science that underpins it. This is not an issue unique to NSW; it was identified by the Senate Committee in an inquiry into the effectiveness of threatened species and ecological communities' protection in Australia (Commonwealth of Australia 2013).

The proposed 'Biodiversity Conservation Act'should require the NSW Scientific Committee to undertake five-year periodic reviews to identify information gaps and ensure currency of the lists. Such reviews should be appropriately publicised and need to be properly supported by OEH. To add scientific rigour and accountability, these reviews should be subject to independent peer review by qualified scientific experts.

Recommendation 32 – Adopt a more strategic approach to listing threatened species and ecological communities.

Recommendation 33 – Require the NSW Scientific Committee to undertake periodic five-year reviews of lists. These reviews should be subject to independent scientific peer review.

Harmonising State and Commonwealth listing processes

A concern among industry, local and state governments is the inconsistency, gaps and overlaps between State and Commonwealth threatened species lists, leading to increased regulatory burden (submissions 45, 229 & 386). The International Fund for Animal Welfare suggests that harmonised lists would foster greater collaboration and strategic outcomes for biodiversity conservation (submission 291).

The present confusion caused by multiple lists and duplication of assessment effort would be addressed if State and Commonwealth listing processes were harmonised. To achieve this:

- listing categories and assessment criteria should align with the International Union for Conservation of Nature (IUCN) Red List Categories and Criteria for threatened species
- current criteria for assessing ecological communities should be reviewed having regard to the IUCN risk assessment framework for ecosystems and listing categories for threatened ecological communities should align with the IUCN List categories of threatened ecosystems
- there should be work towards an agreed classification system for ecological communities to ensure consistency in how communities are described in NSW and Commonwealth legislative frameworks
- the NSW Scientific Committee should only assess species and ecological communities endemic or near endemic to NSW
- non-endemic species and ecological communities could be assessed by the NSW Scientific Committee having regard to whether their distribution in NSW is significant for their long term conservation
- there should be a transitional period to ensure that non-endemic species and ecological communities currently listed under the *Threatened Species Conservation Act 1995* continue to be listed until assessed for listing under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*
- species and ecological communities that occur in NSW and which are listed as threatened under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* should automatically be included on the State list in a separate schedule and identified as being a matter of national environmental significance.

Commonwealth, state and territory governments are currently considering possible arrangements to harmonise listing processes nationally and the panel supports this process being expedited.

Recommendation 34 – Work with the Commonwealth Government to harmonise State and Commonwealth lists of threatened species and ecological communities.

7.3 Classification and identification of ecosystems

Information that describes and defines vegetation types is important for decision makers. It helps to consistently map vegetation and produce uniform inventories of vegetation resources (including vegetation condition – extent and quality). The NSW Vegetation Information System[41] provides the NSW Government, its clients and the community with a central authoritative repository for native vegetation data that is the basis for predicting the distribution of vegetation communities.

[41] More information about the NSW Vegetation Information System is available on OEH's website at <http://www.environment.nsw.gov.au/research/VegetationInformationSystem.htm>.

Part of the NSW Vegetation Information System is a system for classifying plant community types.[42] This classification system aims to provide a robust and clear list of community-level vegetation types for use in vegetation mapping, metric-based decision-making, and as a standard typology for other planning and data gathering programs.

The list of plant community types is currently being refined. This effort is seeking to apply a high standard of scientific rigour, including more precise diagnostic characteristics, to address long standing debate and difficulties surrounding the on-ground identification of plant community types (including threatened ecological communities) in NSW (submissions 40 & 391).

OEH should, as a priority, continue to refine the plant community types and the current program of vegetation mapping across NSW. Additional resources may be required to complete this work.

Recommendation 35 – Prioritise improvements to the plant community types classification system and the development of maps to support decision making (including threat and risk assessment for ecological communities).

7.4 Tracking biodiversity status across NSW and reporting on the outcomes of actions to conserve biodiversity

Developing a robust monitoring, evaluation and reporting framework

Current monitoring, evaluation and reporting processes do not provide a clear picture of the status of biodiversity, trends in biodiversity condition, extent of pressures or the success of interventions (Dangerfield 2012). Data on species is lacking with just over a quarter of native terrestrial vertebrate species monitored sufficiently to reliably detect changes in their status. For plant species, there is little suitable data to quantify the rate or magnitude of change (NSW EPA 2012).

Many stakeholders highlighted the need for better monitoring, evaluation and reporting (submissions 356, 369 & 372). The panel supports the view that long-term monitoring and evaluation is an essential tool for the effective management of biodiversity (Lindenmayer & Likens 2010). Without robust monitoring, evaluation and reporting, it is not possible to evaluate the effectiveness or return on investment of actions taken to conserve biodiversity. It also plays an important role in engaging the public in environmental issues through communicating information on the status of biodiversity (Possingham et al 2012).

To better inform reports to the public and enable continuous improvement, monitoring and evaluation should be included in all programs and it should be ongoing. Reporting must adopt a

[42] Plant community types are assemblages of plant species that share similar floristic, structural and environmental attributes. They are separable from one another by the frequency and abundance of characteristic species and the habitat and geographical area in which they occur. The floristic and environmental characteristics are defined using systematically collected field data and objective and transparent classification.

'real time' approach to facilitate changes to implementation of programs and focus on outcomes, including the objectives of the proposed new 'Biodiversity Conservation Act'.

The Government should develop and implement a robust monitoring, evaluation and reporting framework for biodiversity conservation. Given that biodiversity conservation is a shared responsibility it is recommended that a whole of government process be undertaken to prioritise monitoring and evaluation efforts.

The new framework should build on lessons from the implementation of the *NSW Natural Resource Management Monitoring, Evaluation and Reporting Strategy 2010 - 2015* (DECCW 2010), including the review undertaken by the Natural Resources Commission (2012) and the reviews of monitoring activities in OEH and Department of Primary Industries.

The panel acknowledges there are limited resources available for monitoring and evaluation and suggests initial efforts should be made by the Government through the new legislation to:

- ensure that data collected is made accessible to the broader public through a single portal
- look for opportunities to reduce data collection costs by using new technology
- continue to support modelling and forecasting frameworks to enable future states to be predicted
- make better use of existing evaluation and accounting tools.

Recommendation 36 – Develop and implement a robust whole of government monitoring and evaluation framework to enable reporting on the condition (quality and extent) of biodiversity, effectiveness of management actions and the objectives of the proposed new 'Biodiversity Conservation Act'.

Statutory review of the new 'Biodiversity Conservation Act'

The new legislation should be subject to a mandatory statutory review of its effectiveness and impact every five years. The mandatory statutory review should evaluate and report on the status and trends of biodiversity and assess:

- the Act's effectiveness in achieving its objectives
- the appropriateness of government policies and measures
- the efficiency and effectiveness of programs
- any need for improvements.

The proposed new 'Biodiversity Conservation Act' would not operate in isolation. It will interact with other legislation, such the *Environmental Planning and Assessment Act 1979* and the *Local Land Services Act 2013*, and other non-statutory programs. Monitoring, evaluation and reporting systems should be designed to capture all activities to undertake a comprehensive review.

Recommendation 37 – Mandate a statutory review of the legislation every five years to assess whether the proposed new 'Biodiversity Conservation Act' is meeting its objectives.

7.5 Understanding the values of biodiversity for the community

Access to indigenous knowledge

An integral part of Aboriginal people maintaining a connection to country is their ability to use native plants and animals for cultural purposes. The *National Parks and Wildlife Act 1974* contains a range of exemptions from restrictions on picking or possessing protected native plants in NSW parks and reserves, and requires Aboriginal cultural practices to be considered in the development of management plans for protected native plants.

There is evidence that Aboriginal people's traditional knowledge has rarely been used in assessing threats and extinctions risk, monitoring and evaluating biodiversity status and trends, in identifying appropriate conservation action and in understanding the response of biodiversity to certain activities (submission 204).

Aboriginal people using threatened species for cultural practices are also protected from threatened species offence provisions. It is recommended that these provisions be carried forward in the development of the new 'Biodiversity Conservation Act', and that consideration is given to better integrating the knowledge of Aboriginal people in the management of NSW native plants and animals.

Incorporating traditional knowledge into these processes will improve the quality of information and resulting decisions and drive the meaningful involvement of Aboriginal people in biodiversity conservation, which may improve local-level involvement in conservation and land management action.

Community values

There is an increasing need to understand the value of biodiversity to the community. This can be achieved through robust social surveys (submission 360). There is also increasing interest in valuing environmental assets through environmental accounting approaches. Consideration could be given to exploring these frameworks (Sbrocchi 2013).

7.6 Expert Advice

Part 9A of the *Threatened Species Conservation Act 1995* provides for a Biological Diversity Advisory Council and a Social and Economic Advisory Council. The legislation provides for overly specialised roles and these bodies have never been established. The panel recommends these provisions be repealed.

However, the Minister for the Environment will need expert advice in the implementation of aspects of the proposed new 'Biodiversity Conservation Act', including:

- formulating frameworks for monitoring and evaluating the state of biodiversity and outcomes of interventions
- addressing key knowledge gaps
- setting statewide priorities for investment in private land conservation

- setting priorities for threat management and threatened species recovery action
- the proposed new method for biodiversity assessment
- ensuring quality, accuracy and completeness of data supporting the new biodiversity assessment method.

The new legislation should provide for a panel of relevant experts, including expertise on traditional ecological knowledge, to provide or commission expert advice to assist the Minister in implementing the Act.

The new 'Biodiversity Conservation Act' will require the preparation of a number of strategic plans or frameworks to guide investment and conservation action (see Section 5). As these would effectively achieve the purpose of the former Biological Diversity Strategy, the panel recommends that the requirement to prepare a statewide Biological Diversity Strategy be repealed.

Recommendation 38 – Establish an expert panel to advise the Minister for the Environment on matters relevant to the operation of the new 'Biodiversity Conservation Act'.

Recommendation 39 – Repeal the requirement to prepare a statewide Biological Diversity Strategy.

8. Objects for a new 'Biodiversity Conservation Act'

Taking into account the reforms proposed throughout this report, it is clear that to modernise and simplify the legislative framework:

- the laws under review should be repealed
- the regulation of new agricultural development should be transferred to the planning system and agricultural land management to Local Land Services
- mechanisms dealing directly with the conservation of biodiversity should be integrated into a single 'Biodiversity Conservation Act'
- new legislative objects and principles should be drafted.

Recommendation 40 – Modernise and simplify the legislative framework by:

(a) repealing the laws (or parts) under review

(b) drafting a new 'Biodiversity Conservation Act' that takes an outcomes-focused, integrated and risk-based approach to biodiversity conservation, adopts the legislative objects outlined in Recommendation 42 and establishes the mechanisms recommended in this report

(c) making consequential amendments to other laws to transfer the regulation of agricultural development to the planning system and the supervision of agricultural land management to the Local Land Services.

Legislative Objects

The panel has concluded that the new 'Biodiversity Conservation Act' requires an integrated and simpler set of high-level legislative objects. The objects can be significantly simplified as a result of the reforms that are proposed to move certain matters dealt with by the existing laws into the *Environmental Planning and Assessment Act 1979* and the *Local Land Services Act 2013*.

NSW biodiversity objectives are unclear. The objects of the current laws contain an unstructured mix of high-level environmental goals, principles and mechanism-based objects for achieving biodiversity conservation.

There is a contradiction in the legislative objects of the *Native Vegetation Act 2003*. The object that seeks to improve or maintain environmental outcomes (applied at a site scale) is inconsistent with other objects in the Act to 'manage native vegetation on a regional basis in the social, economic and environmental interests of the State' and the requirement to act in 'accordance with the principles of ecologically sustainable development'.

The panel also considers that some of the current objects are unachievable. For example, a primary goal of the *Threatened Species Conservation Act 1995* is to prevent the extinction of threatened species, populations and ecological communities. While preventing all extinctions is common to a number of international and national conventions and laws, it does not account for natural extinctions, and may only be feasible with significantly increased funding or suboptimal levels of social and economic development.

In developing an overall philosophy for biodiversity conservation in NSW and objectives to underpin a new legislative framework, the panel has considered:

- an evaluation of the objects of the laws under review (OEH 2014b)
- the scientific evidence for government intervention
- NSW's national and international commitments (including the Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets[43] from the UN Convention on Biological Diversity and its supporting Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity[44])
- how biodiversity legislation should fit within the broader context of policy frameworks that influence the use and management of biodiversity(including laws that regulate land use planning, development, biosecurity, natural resource use and protected areas)
- the strengths and weaknesses in the objects of the laws under review
- themes and trends in biodiversity conservation laws in Australia and elsewhere
- principles of good legislative design
- the objects of other Acts to which some of elements of the current laws would be transferred.

A new and simpler set of legislative objects is required. The objects should be clear about what the legislation is seeking to achieve, internally consistent, measurable, give clear guidance to decision makers (including courts) and not conflict with the objects of closely related legislation. The legislation should focus on outcomes and performance, rather than on process and prescription.

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[43] The Strategic Plan for Biodiversity 2011- 2020 and Aichi Biodiversity Targets from the UN Convention on Biological Diversity are available at <http://www.cbd.int/sp/targets/>.

[44] The Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity 2011-2020 is available at <http://www.cbd.int/authorities/planofaction.shtml>

The panel recommends that the overarching goal for the new 'Biodiversity Conservation Act' should be:

> *To maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development.*

To support the overarching goal the panel recommends the core objects for the new 'Biodiversity Conservation Act' in NSW should be:

1. To conserve biodiversity and ecological integrity[45] at bioregional and state scales, by:

- taking conservation and threat abatement action to slow the rate of biodiversity loss (relates to the Saving our Species program – see Section 5)
- facilitating prioritised investment in conservation on private land to conserve biodiversity and increase ecosystem services (relates to the proposals for private land conservation instruments – see Section 4)
- effectively regulating high-risk human interactions with wildlife (see Section 6)
- ensuring that land management activities appropriately protect biodiversity and ecosystem services (relates to Minister's proposed concurrence role for code-based land management – see section 3)

2. To facilitate sustainable development, by:

- establishing market-based conservation mechanisms through which the environmental impacts of development and activities can be avoided, minimised and offset at landscape and site scales (relates to establishing the biodiversity certification and biodiversity offsetting schemes – see Sections 3 and 4)
- establishing a method to assess the environmental impacts of proposed development and conservation management actions (relates to establishing a single method for biodiversity assessment – see Section 3)

3. To improve and share knowledge, including local and Aboriginal knowledge, about the status and values[46] of biodiversity and ecosystem services and effectiveness of conservation actions, by:

- assessing the extinction risk of species and ecological communities through an independent and rigorous scientific process (relates to proposals to improve the Scientific Committee listing process – see Section 7)

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[45] **Ecological integrity** is defined by the IUCN as maintaining the diversity and quality of ecosystems and enhancing their capacity to adapt to change and provide for the needs of future generations (for more information see, http://cmsdata.iucn.org/downloads/en_iucn_glossary_definitions.pdf>.

[46] Values in this context mean environmental, economic, social values (including the notion of intrinsic value).

- collating and sharing data, and monitoring, evaluating and reporting on the status of biodiversity and ecosystem services and the effectiveness of conservation actions (see Section 7)
- drawing on expert advice and knowledge to assist the Minister in implementing the Act (relates to expert advice – see Section 7).

Recommendation 41 – Adopt an overarching goal for the proposed new 'Biodiversity Conservation Act':

to maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development.

Recommendation 42 – Adopt objects for the proposed new 'Biodiversity Conservation Act':

(a) to conserve biodiversity and ecological integrity at bioregional and state scales

(b) to facilitate sustainable development

(c) to improve and share knowledge, including local and Aboriginal knowledge, about the status and values of biodiversity and ecosystem services and the effectiveness of conservation actions.

Ecologically sustainable development

Ecologically sustainable development (ESD) should be a fundamental principle of the new 'Biodiversity Conservation Act'. ESD requires effective integration of economic, social and environmental considerations.

Ecologically sustainable development, or just sustainable development, is widely understood both nationally and internationally (COAG 1992, Department for Environment, Food and Rural Affairs UK 2011 & Environment Canada 2010). Over the last 25 years, ESD has been extensively incorporated into the laws, policies and programs of international and national governments as a significant policy objective. It is included in the objects of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and is referenced in most NSW planning and environment laws, including the *Environmental Planning and Assessment Act 1979*.

It is clear that ESD is and should remain a fundamental and core objective of the NSW planning system (submissions 46, 130 & 252). This is essential if NSW wishes to retain accreditation of assessment and approval processes under bilateral agreements or strategic assessments made under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. In Section 3 of this report, the panel has concluded that the agricultural development should be assessed and approved under the planning system.

The current definition of ESD in NSW outlined in section 6(2) of the *Protection of the Environment Administration Act 1991* requires 'effective integration of economic and environmental considerations in decision-making processes'. There is no explicit reference to social

considerations (beyond intergenerational equity). This is inconsistent with national and international practice.

The panel recommends that the NSW definition of ESD be amended to require the effective integration of economic, social and environmental considerations in decision making. An updated definition would bring NSW laws into line with other Australian legislation and international best practice on sustainable development.

The amended definition in section 6(2) of the *Protection of the Environment Administration Act 1991* would be:

> *Ecological sustainable development requires the effective integration of economic, social and environmental considerations in decision-making processes. Ecological sustainable development can be achieved through the implementation of the following:*
>
> - *the precautionary principle, …*
> - *inter-generational equity, …*
> - *conservation of biological diversity and ecological integrity, …*
> - *improved valuation, pricing and incentive mechanisms.*

Recommendation 43 – Amend the definition of Ecologically Sustainable Development in the *Protection of the Environment Administration Act 1991* to require integration of social (as well as economic and environmental) considerations in decision making.

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