

THE FUTURE FOR BIODIVERSITY IN NSW

Environment groups' joint response to the consultation package
of reforms to land management and biodiversity conservation in NSW

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TABLE OF CONTENTS

1. INTRODUCTION	3
2. SUMMARY OF KEY CONCERNS	6
3 THE NEED FOR STRONG BIODIVERSITY CONSERVATION LAWS	14
4 RESPONSE TO KEY ELEMENTS OF THE REFORM PACKAGE	16
4.1 GOVERNMENT CONSULTATION	16
4.2 OBJECTS OF THE NEW ACTS	17
4.3 NATIVE VEGETATION REGULATORY MAP	17
4.4 LAND MANAGEMENT ACTIVITIES	20
4.5 NATIVE VEGETATION CLEARING IN URBAN AREAS AND OTHER AREAS	25
4.6 TEST OF SIGNIFICANCE	26
4.7 BIODIVERSITY ASSESSMENT METHOD	27
4.8 BIODIVERSITY CERTIFICATION	36
4.9 REGULATING WILDLIFE INTERACTIONS	36
4.10 EDUCATION	37
4.11 REGULATING WILDLIFE REHABILITATION PROVIDERS	38
4.12 THREATENED SPECIES LISTINGS	38
4.13 AREAS OF OUTSTANDING BIODIVERSITY VALUE	40
4.14 THE NEW PRIVATE LAND CONSERVATION FRAMEWORK	41
4.15 BIODIVERSITY CONSERVATION INVESTMENT STRATEGY	42
4.16 BIODIVERSITY CONSERVATION TRUST	43
4.17 CARBON AND CLIMATE CHANGE	44
4.18 MONITORING AND REPORTING	46
4.19 COMPLIANCE AND ENFORCEMENT	47
4.20 FUNDING AND RESOURCES	49
REFERENCES	50
APPENDIX 1	51

1. INTRODUCTION

Environment groups have grave concerns that, if implemented, the proposed biodiversity reform package will lead to significant increases in land clearing; reduced habitat for native flora and fauna, including threatened species; reduced soil quality; increased erosion; reduced water quality; and increased carbon emissions.

We urge the NSW Government to abandon the draft *Biodiversity Conservation Bill 2016* and *Local Land Services Amendment Bill 2016* and develop strong biodiversity conservation laws that are scientifically robust and that will deliver improved environmental outcomes, now and for future generations.

Our groups have expended significant time and resources engaging in the current Biodiversity Legislation Review process. We provided significant input into the Independent Biodiversity Assessment Review Panel process, including a detailed submission and response to Panel recommendations¹. Lead groups also engaged in targeted stakeholder engagement with the Government as it developed the draft Bills, however withdrew from that process in February 2016 when it became clear that the Government's position was fixed and our input into the process was not contributing to improvements in biodiversity and conservation policy². Our previous material remains relevant to ongoing discussion about proposed new biodiversity laws for NSW.

After reviewing the draft Bills, and supporting material, many of our key concerns have been confirmed, namely:

- Important land clearing laws will be repealed;
- The legal requirement to 'improve or maintain biodiversity values' is being removed;
- There are no absolute protections for areas of high conservation value;
- The expansion of land clearing codes will lead to a significant increase in land clearing;
- The proposed native vegetation regulatory map will lead to perverse outcomes, including increased clearing;
- There will be increased reliance on offsetting, however important offsetting rules will be discarded;
- The role of the environment minister is reduced and there is significant ministerial discretion in applying the new rules;
- There is no recognition of climate implications;
- Changes to wildlife licencing and wildlife rehabilitation will mean less oversight;
- Changes to private land conservation weaken existing measures, and have not been subject to cost-benefit analysis or consultation with involved landholders;
- There is an overreliance on government funding to achieve conservation gains;
- There is inadequate detail in relation to monitoring and enforcement;
- The proposed new laws contradict existing policy and conservation efforts;
- The draft Bills do not meet the stated aims of the Biodiversity Legislation Review.

¹ See in particular *Conserving and Restoring Biodiversity in NSW - Submission to the Independent Biodiversity Legislation Review Panel* - September 2014 - www.nature.org.au/media/1891/140919-ncc-tec-npa-tws-submission-to-the-independent-biodiversity-legislation-review-panel_final.pdf

² See for example:

- www.standupfornature.org.au/conservation_groups_withdraw_from_mike_baird_s_predetermined_biodiversity_reforms
- www.theguardian.com/australia-news/2016/feb/19/conservation-groups-storm-out-of-consultations-over-land-clearing-law
- www.smh.com.au/nsw/green-groups-blame-national-party-radicals-for-breakdown-in-land-clearing-talks-20160218-gmy5sp.html#ixzz40ZUFAHZk

In our view, the draft Bills have very little to do with biodiversity conservation and are simply designed to facilitate land clearing and development across NSW. The key driver behind the review is a political commitment made by the Nationals party to its constituents to repeal the *Native Vegetation Act 2003*³.

We do not agree with suggestions that the reform process has pitted environment groups against farmers, and that there are strongly opposing views in this debate. It is our experience from attending various fora and running workshops that the majority of land owners reject such drastic changes to biodiversity laws. In fact, our membership includes individual landholders and Landcare groups who support the current system and want to see existing protections remain in place and be strengthened. We are also starting to see a number of individual farmers speak out against the proposed changes⁴.

In order to make this retrograde step appear positive, the reform process has been framed as making much needed improvements to biodiversity conservation laws. While we don't disagree that current laws could be improved, the reform package does not provide the necessary solutions for a new generation of biodiversity conservation laws.

Further, rather than simply addressing land clearing laws, the scope of the reform package is so wide that it deals with all biodiversity assessment and threatened species and wildlife management across NSW. While we had originally seen this as an opportunity to improve biodiversity conservation laws in NSW, we are alarmed that retrograde steps are being taken right across the board.

Our position is not based on unfounded ideology. We have formed this view based on our experience as lead environment groups, our understanding of current scientific literature, and comprehensive analysis of available data and information.

It is not just our groups that have concerns with the reform package, and our long-held position has been vindicated recently as the scientific community has raised its own concerns. These interventions by high profile scientists undermine the scientific credibility of the reforms and validate our concerns that the reforms are politically motivated. In fact, there are key areas of the reforms that are strongly opposed by the scientific community.

For example:

- The Wentworth Group of Concerned Scientists have recently advised that key elements of the reform package will substantially weaken existing protections. They warn that “(t)hese retrograde changes risk returning NSW to an era of unsustainable environmental damage by reinstating broadscale land clearing, resulting in more degraded land, more damage to river systems, increased carbon emissions, and the loss of habitat critical to the survival of threatened species”⁵.

³ See www.theland.com.au/story/3369072/native-veg-ace-for-nats/

⁴ See, for example, <http://www.theland.com.au/story/3687480/gilbert-quits-over-native-veg/> and www.smh.com.au/environment/horseman-protests-on-sydney-harbour-bridge-against-clearing-vegetation-20160623-gppxup.html#ixzz4CNCaInxY

⁵ Letter from the Wentworth Group of Concerned Scientists to NSW MPs, dated 23 May 2016; See also www.smh.com.au/environment/nsw-farmers-stepping-up-tree-felling-even-before-landclearing-laws-loosened-20160612-gph8m5.html

- The Royal Zoological Society of New South Wales is “strongly of the opinion that the proposed biodiversity conservation bill is a step backwards for conservation and a step forward for those who view nature and its conservation as an impediment to development”⁶.

The fact that the reform package contradicts science, facilitates increased land clearing, fails to protect environmentally sensitive areas and does not adequately address climate change impacts is in direct contradiction to the principles of ecologically sustainable development (ESD), in particular the principles of inter-generational equity and conservation of biological diversity and ecological integrity.

Our broad membership and supporter base understand the significant implications of the reform package. Over the course of the eight week consultation period, we engaged with our members and supporters across the State to help them understand the extent of the proposed changes. This led to wide-spread community action, with individuals writing submissions, speaking to their local representatives and educating their own communities about the new laws. It is clear from this response that our members and supporters do not want these proposed changes to go ahead. They have urged us to call on the NSW Government to withdraw the current Bills and develop stronger protections for biodiversity and conservation in NSW. Furthermore, having presented our case to Landcare fora around the State, we are confident that there is no appetite among the vast majority of responsible farmers to return to a bygone era. These reforms completely undermine the efforts of NSW’s 60,000 Landcarers and are being driven by a much smaller group of self-serving farmers.

Given our fundamental objection to the draft Bills, we have not provided a detailed response to the reform package or a list of recommendations—beyond the recommendation to withdraw the draft legislation. Rather, our submission highlights our key concerns and responds to key elements of the reform package. While we have not directly answered the consultation questions, we have addressed the majority of questions in responding to the key elements of the reform package.

Our alliance of groups will continue working to expose the flaws in the draft legislation and demanding that the draft Bills be withdrawn and replaced with strong biodiversity and conservation laws that will protect the NSW environment and communities, now and in the future.

⁶ Royal Zoological Society of New South Wales, *Comment on the NSW Biodiversity Reforms and Draft Biodiversity Legislation*, 3 June 2016

2. SUMMARY OF KEY CONCERNS

NSW environment groups have grave concerns that, if implemented, the proposed biodiversity reform package will lead to significant increases in land clearing; reduced habitat for native flora and fauna, including threatened species; reduced soil quality; increased erosion; reduced water quality; and increased carbon emissions. A summary of our key concerns are outlined below.

2.1 IMPORTANT LAND CLEARING LAWS WILL BE REPEALED

We do not support the draft *Biodiversity Conservation Bill 2016* and *Local Land Services Amendment Bill 2016* as they do not provide the same level of environmental protection as existing laws, including the *Native Vegetation Act 2003* and *Threatened Species Conservation Act 1995*.

The *Native Vegetation Act 2003* is one of the state's most significant conservation laws because it protects bushland and wildlife habitat across most of NSW. It has led to over 1000 property vegetation plans (PVPs) being established, resulting in over 4 million hectares of native vegetation on farmland under improved management⁷. The NSW *State of the Environment Report 2015* identified the *Native Vegetation Act* as a key piece of legislation protecting soils and facilitating sustainable land management⁸. Further, WWF has estimated that under the *Native Vegetation Act* land clearing has declined by about 40% and 116,000 native mammals have avoided death due to agricultural clearing each year⁹.

We recognise that there have been some difficulties with the implementation of the *Native Vegetation Act 2003*, however we contend that those difficulties stem from inadequate resourcing and support for landholders. Rather than repealing outright the laws that provide important protection for our native vegetation, soils, and water, we suggest that there should be increased efforts in properly implementing the laws, including increased funding for private land conservation under the existing laws and increased capacity for LLS to develop and approve PVPs.

2.2 THE LEGAL REQUIREMENT TO 'IMPROVE OR MAINTAIN BIODIVERSITY VALUES' IS BEING REMOVED

The legal requirement to 'improve or maintain biodiversity values' is a key feature of the *Native Vegetation Act 2003* and Biodiversity Certification under the *Threatened Species Conservation Act 1995*. We are concerned that this important component of current laws is being repealed and not replaced with any meaningful legal requirement to ensure that biodiversity in NSW continues to be enhanced. The Independent Panel did not recommend the complete removal of 'improve or maintain' biodiversity from NSW biodiversity and conservation laws, rather that it be moved from site to regional scale¹⁰. This has not occurred.

The lack of an explicit test has meant that threats such as land degradation via clearing will not be adequately considered in the new legislation, as is currently required. We note that the *Soil Conservation Act 1938* and the Soil Conservation Service were established in response to

⁷ As shown by the Office of Environment and Heritage's public register of Property Vegetation Plans www.environment.nsw.gov.au/vegetation/approvedclearing.htm

⁸ NSW State of the Environment Report, page 91, www.epa.nsw.gov.au/soe/soe2015/index.htm

⁹ WWF, *Native wildlife at risk if NSW Native Vegetation Act is repealed*, (2015)

¹⁰ The Independent Biodiversity Legislation Review Panel only recommended that 'improve or maintain' should be removed at a site scale. *A review of biodiversity legislation in NSW – Final Report*, December 2014, p 7

widespread soil degradation in NSW, and the *Western Lands Act 1901* was introduced to ensure the appropriate management of fragile ecosystems¹¹. The EOAM, like these pieces of legislation, was designed to ensure that development did not have unforeseen, longer-term negative consequences. In this light, the reforms are a retrograde step for agriculture and the environment.

2.3 THERE ARE NO ABSOLUTE PROTECTIONS FOR AREAS OF HIGH CONSERVATION VALUE

The proposed new laws do not provide any absolute protections for biodiversity, in particular areas of high conservation value. For example:

- The draft Land Clearing Codes allow clearing in environmentally sensitive areas. The self-assessable codes do not restrict clearing of threatened ecological communities. Permitting clearing of threatened ecological communities makes a mockery of the listing process.
- In the case of clearing that triggers the Biodiversity Assessment Method, it is proposed to establish a 'red flag' for 'serious and irreversible impacts on biodiversity values', however information on what constitutes 'serious and irreversible impacts' is currently missing from the draft BAM. Further, the application of the 'serious and irreversible impacts' red flag is discretionary for major projects.
- While there are also proposed provisions relating to areas of outstanding biodiversity value, it is unclear how these will operate in practice and whether they will truly protect areas of outstanding biodiversity value.
- The Draft Biodiversity Conservation Bill 2016 contains provisions that allow conservation agreements to be overridden:
 - Clause 5.23(4) of the Draft Biodiversity Conservation Bill allows the Biodiversity Conservation Trust to terminate a conservation agreement, without the consent of the owners of the land, if it 'is of the opinion that the agreement is no longer needed for, or is no longer capable of being used to achieve, any purpose for which the agreement was entered into.
 - Clauses 5.18 and 5.19 of the Draft Biodiversity Conservation Bill allow the Minister to terminate a biodiversity stewardship agreement, without the landholder's consent, in order to facilitate mining and petroleum activities on the site.

Environment groups have consistently argued that environmentally sensitive areas should be off limits to development and land clearing activities. The overhaul of NSW biodiversity laws provides an opportunity to establish legal mechanisms that would provide this level of protection; however the draft legislation fails to achieve this. This issue has also been raised by the Wentworth Group of Concerned Scientists, who noted that a major flaw of the reform package is the lack of mapping for areas of high conservation value, as recommended by the Independent Biodiversity Legislation Review Panel¹².

¹¹ www.crownland.nsw.gov.au/crown_land/western_region/western_land_leases

¹² Letter from the Wentworth Group of Concerned Scientists to NSW MPs, dated 23 May 2016

2.4 THE EXPANSION OF LAND CLEARING CODES WILL LEAD TO A SIGNIFICANT INCREASE IN LAND CLEARING

We have significant concerns that the new laws will dramatically increase the scope of ‘code-based’ land clearing. We are particularly concerned with proposed new codes relating to farm efficiency and equity. The proposed new Codes for NSW are strikingly similar to those implemented in Queensland, and even though there will be some oversight by the LLS, the LLS will not have the ability to refuse clearing that is compliant with the codes.

Clearing under codes will accelerate Key Threatening Processes such as ‘clearing of native vegetation’, ‘loss of hollow bearing trees’ and ‘loss of dead wood and dead trees’. Alarming, clearing of Endangered Ecological Communities (EECs) or threatened species habitat will be permitted under self-assessable codes. The proposed rules around ‘set aside areas’ are inadequate as they will not prevent the destruction of EECs and set asides do not guarantee the protection of an area of equivalent or better native vegetation.

2.5 THE PROPOSED NATIVE VEGETATION REGULATORY MAP (NVR MAP) WILL LEAD TO PERVERSE OUTCOMES, INCLUDING INCREASED CLEARING

The proposed new regime is premised on a new map that will categorise land as Category 1 – unregulated, Category 2 – regulated, or exempt. A similar approach to land management in Queensland has led to a huge increase in clearing, 67% of which was accounted for by high-value regrowth on unregulated land¹³ (‘Category X’ land, which is equivalent to the proposed Category 1 unregulated land in NSW). We therefore anticipate these reforms to also result in extensive clearing of regrowth in NSW. This ignores the fact that post-1990 regrowth may have significant biodiversity values. Interaction with trained staff from LLS or OEI and development of a Property Vegetation Plan which can highlight significant habitat, as is currently the case under the *Native Vegetation Act*, is a much better way of ensuring environmental and production outcomes are not antagonistic.

The failure to include a third category of land in the NVR map—land off limits to development due to its biodiversity value—has meant that there is no certainty as to the protection of high biodiversity value land. The Wentworth Group of Concerned Scientists highlighted this failure in their letter to MPs dated 23rd May 2016¹⁴. This is a missed opportunity to protect high ecological value land.

The remapping of Category 2 land to Category 1 following code-based clearing means that the NVR Map affords only marginally more protection to Category 2 land than Category 1. Landholders are provided with a mechanism to change the categorisation of their land. This makes a mockery of any assertion that these reforms are designed to protect nature.

Because of the self-assessable codes facilitating remapping of Category 2 to Category 1 and the failure to map Category 3 land (off limits) the NVR Map acts solely as a tool to monitor clearing rates.

¹³ Bulinski et. al. 2016. Tree clearing in Australia: Its Contribution to Climate Change, CO2 Australia Limited

¹⁴ Letter from the Wentworth Group of Concerned Scientists to NSW MPs, dated 23 May 2016

2.6 THERE WILL BE INCREASED RELIANCE ON OFFSETTING, HOWEVER IMPORTANT OFFSETTING RULES WILL BE DISCARDED

Under the new regime biodiversity offsetting will be regulated through a new Biodiversity Assessment Method. The Draft Biodiversity Assessment Method does not reflect best practice and carries over many of the criticised elements of the NSW Biodiversity Offsets Policy for Major Projects.

In particular:

- There is no clear objective to protect biodiversity or achieve net positive outcomes;
- Limits on biodiversity offsetting ('red flag' areas) in the *Draft Biodiversity Assessment Method* are limited and uncertain;
- The *Draft Biodiversity Assessment Method* allows for variations to 'like for like' offsetting;
- The *Draft Biodiversity Assessment Method* allows the use of supplementary measures (now called 'biodiversity conservation actions') in place of genuine offsets;
- The *Draft Biodiversity Assessment Method* allows mine site rehabilitation to be attributed as biodiversity offset credits;
- The *Draft Biodiversity Assessment Method* allows proponents to pay money into an Offsets Fund prior to adequate offsets being identified;
- The *Biodiversity Conservation Bill 2016* and *Local Land Services Amendment Bill 2016* allow for discounting of biodiversity credits;
- The *Biodiversity Conservation Bill 2016* does not protect offsets sites in perpetuity and allows for 'offsetting of offsets';
- It is unlikely that the NSW policy as proposed will meet federal standards.

2.7 THE ROLE OF THE ENVIRONMENT MINISTER IS REDUCED AND THERE IS SIGNIFICANT MINISTERIAL DISCRETION

Currently, the Minister for the Environment has carriage of the *Native Vegetation Act 2003*, including the approval of land clearing applications, although a number of the Minister's functions, including the assessment and approval of Property Vegetation Plans, have been delegated to the Local Land Service (LLS). Under the new regime, it is proposed that land clearing applications will be dealt by the Minister for Primary Industries under amendments to the *Local Land Services Act 2013* and the LLS will have an increased role in overseeing certain land clearing activities.

We are also concerned that there is significant Ministerial discretion for both the Environment Minister and Primary Industries Minister under the new laws, including in relation to 'discounting' biodiversity offsetting credits, or approving major projects or biodiversity certificate applications that have 'serious or irreversible impacts on biodiversity'.

2.8 THERE IS NO RECOGNITION OF CLIMATE IMPLICATIONS

The reform package does not deal with the significant climate implications of land clearing. Land clearing affects regional climates and contributes to increased carbon emissions. Emissions from the land sector are rising sharply in Australia, driven by the relaxation of land clearing laws in Queensland under the Newman government. This is despite the federal government making land sector projects the cornerstone of its Direct Action policy, and having spent \$1.2 billion on avoided clearing and revegetation. Researchers have stated that extensive reforestation is required to reverse regional climate change. Because these reforms will increase land clearing, they are therefore the opposite policy response to that required.

2.9 CHANGES TO WILDLIFE LICENCING AND WILDLIFE REHABILITATION WILL MEAN LESS OVERSIGHT

The proposed change from a licensing system to an accreditation program suggests that there will be more self-assessed activities, and therefore less effort focused on compliance. Reduced monitoring and record keeping may encourage illegal collection of native animals from the wild, impacting on biodiversity at the local scale, particularly in accessible locations close to population centres.

Fragmentation of the wildlife rehabilitation sector, through either new groups within existing jurisdictions, fragmentation of the jurisdiction of existing groups, or by allowing non-resident members to care for wildlife elsewhere, threaten the viability of the whole sector. Without a strong legal framework, it will be extremely challenging to ensure adequate standards of training and care, in a sector that is almost entirely voluntary

At this stage there is little information available about the new Codes of Practice or accreditation scheme for wildlife carers in the draft Bills or supporting material. The Government should engage closely with relevant stakeholders if it continues to develop this part of its reform package.

2.10 CHANGES TO PRIVATE LAND CONSERVATION WEAKEN EXISTING MEASURES AND HAVE NOT BEEN SUBJECT TO COST-BENEFIT ANALYSIS OR CONSULTATION WITH INVOLVED LANDHOLDERS

The importance of consulting with landholders already engaged in private land conservation, particularly those who have done so in-perpetuity through a Conservation Agreement signed with the NSW Minister for the Environment, has been repeatedly expressed. We know that this consultation has not occurred, and as a result the views of those most affected by the proposed changes have been ignored. Private landholders who have entered into Conservation Agreements with the NSW Government did so in the belief that when it comes to matters of species and habitat protection, enforcement and compliance, monitoring and legal protection, there is a permanent Government agency capable of safeguarding their expectations and aspirations. Most owners of property with Conservation Agreements or Nature Conservation Trust agreements in place will have made their choice for a reason, and the transition of existing agreements into the new system in the absence of adequate consultation could lead to significant contention and unrest.

We disagree with the weakening of standards for Conservation Agreement establishment as high biodiversity thresholds should be maintained to ensure the most valuable land is prioritised for the creation of new agreements, and do not support provisions that continue to allow all tiers of agreement to be trumped by mining and petroleum interests without the landholder's consent,

undermining the integrity of the private land conservation system. We are also unconvinced that the proposed Biodiversity Conservation Trust will be able to facilitate private land conservation in NSW more effectively than a better funded Government Department. New South Wales has cause to be proud of its strong and effective history in administering the longest running and arguably most successful private land conservation program in Australia, which is in relatively poor shape only due to budget cuts by successive Governments. Given the level of public funding proposed to be at the disposal of the private land conservation provider, a cost-benefit analysis must be undertaken to determine the most efficient and effective option prior to the decision on a provider being made.

2.11 THERE IS AN OVERRELIANCE ON GOVERNMENT FUNDING TO ACHIEVE CONSERVATION GAINS

A key premise of the Government's reform package is increased investment in private land conservation. While increased investment in private land conservation is welcomed as a way of supporting landholders who undertake conservation work on their land and contributing to biodiversity protection in NSW, it should not be at the expense of strong biodiversity laws. In fact, the Wentworth Group have stated that in the absence of laws to protect native vegetation, the funding for private land conservation amounts to no more than a taxpayer subsidy to clear land¹⁵.

This is not the first time that Government has invested in private land conservation. When the *Native Vegetation Act 2003* was introduced funding was provided for on-ground works to assist farmers to maintain or improve native vegetation for biodiversity, water quality, soil and salinity outcomes, yet when the money ran out, goodwill was lost¹⁶. That will happen again, but this time there will be no law to stop land clearing.

2.12 THERE IS INADEQUATE DETAIL IN RELATION TO MONITORING, COMPLIANCE AND ENFORCEMENT

The proposed changes are likely to have a significant impact on land clearing rates and biodiversity outcomes, yet the Government has been unable to state how much additional land clearing will occur under these new laws. There are also no clear objectives or targets against which the new laws can be monitored and measured.

The Government has also not determined which agencies will be responsible for the enforcement of the new laws. The Government must ensure that there is adequate resourcing of both the Local Land Services and Office of Environment and Heritage to effectively monitor and enforce the new laws.

¹⁵ Letter from the Wentworth Group of Concerned Scientists to NSW MPs, dated 23 May 2016

¹⁶ We understand that when the Native Vegetation Act 2003 and Catchment Management Authorities Act 2003 were introduced funding was provided to CMAs to assist farmers to repair the landscape, see Wentworth Group of Concerned Scientists, Submission to Biodiversity Legislation Review Panel, September 2014, <http://wentworthgroup.org/wp-content/uploads/2014/10/Submission-to-Native-Vegetation-Review-Final-September-2014.pdf>

2.13 THE PROPOSED NEW LAWS CONTRADICT EXISTING POLICY AND CONSERVATION EFFORTS

These reforms are a prime example of the dysfunction that currently exists within and between governments of different tiers. For example:

- They exacerbate known Key Threatening Processes (KTPs): The new laws will exacerbate the key threatening processes ‘clearing of native vegetation’, ‘loss of hollow-bearing trees’ and the ‘removal of dead wood and trees’ via increased clearing, including broad-scale clearing and clearing of paddock trees and woodland patches. KTPs are identified by the NSW Scientific Committee and are supposed to help the government develop policy that avoids further damage to biodiversity.
- They undermine conservation efforts: Landholders who have committed to managing their properties to ensure conservation outcomes via participation in Landcare, publically funded paddock tree restoration efforts or the Great Eastern Ranges initiative are being given a message that their efforts to increase the area of native vegetation are no longer valued.
- They remove important legislation to protect farmers: The NSW State of Environment Report 2015 (SOE) identified the *Native Vegetation Act*, along with the *Soil Conservation Act*, as a key piece of legislation protecting soils and facilitating land management. The SOE also indicated that soil condition is still in decline across the state. Removing the legislation that protects soils does not serve farmers.
- Clashes with Federal legislation: The reforms completely fail to take into account the Federal *Environment Protection and Biodiversity Conservation Act* (EPBC Act) and the need for landholder to comply with that piece of legislation. Many of the areas that may be cleared under codes are likely to either be EPBC listed ecological communities, or habitat for EPBC listed species. This exhibits a casual disregard for matters of national environmental significance, and wilful ignorance of almost identical reforms in Queensland that made a similar omission in regards the EPBC Act.
- Climate change: These reforms ignore the fact that averted emissions via avoided clearing have been the cornerstone of the Federal Government’s Direct Action policy to reduce Australia’s carbon emissions. In fact, up to the present, the Federal Government has spent \$1.2 billion in purchasing avoided emissions from the land sector—including avoided deforestation. The Queensland reforms and the subsequent increase in clearing that has resulted has already undermined much of these taxpayer-funded emissions reductions¹⁷. The striking similarity of the NSW reforms to those of Queensland leads us to expect a similarly dramatic increase in land clearing, and land use based emissions, in NSW.

¹⁷ See, for example, www.theguardian.com/australia-news/2016/feb/29/exclusive-land-clearing-surge-in-qld-set-to-wipe-out-direct-action-gains-report

2.14 THE DRAFT BILLS DO NOT MEET THE STATED AIMS OF THE BIODIVERSITY LEGISLATION REVIEW

The original terms of reference for the Biodiversity Legislation Review included the following aims¹⁸:

“To establish simpler, streamlined and more effective legislation that will:

- *facilitate the conservation of biological diversity*
- *support sustainable development*
- *reduce red-tape”*.

We do not believe that the proposed Bills meet these aims.

Sustainable development and the conservation of biological diversity

Firstly, in our view, the reform package is inconsistent with the principles of ecologically sustainable development (ESD). It is disconcerting that the Government’s public consultation material includes a theme for ‘ESD’ yet the only aspect of the reform package that sits under ‘ESD’ is a flawed biodiversity offsetting regime (see further our comments on the Biodiversity Assessment Method below).

The principles of ecologically sustainable development are well known, and include:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity,
- improved valuation, pricing and incentive mechanisms

In our view, the reform package fails to implement these key principles. The fact that the reform package contradicts science, facilitates increased land clearing, fails to protect environmentally sensitive areas and does not adequately address climate change impacts is in direct contradiction to the principles of ESD, in particular the principles of inter-generational equity and conservation of biological diversity and ecological integrity.

Environment groups and the scientific community have warned the Government of the significant risks posed by these reforms to biodiversity and future generations yet the Government continues to push ahead with retrograde changes and mislead the public in relation to ecologically sustainable development.

Simpler, streamlined and more effective legislation and reduced red-tape

Secondly, we do not believe the draft Bills have created simpler, streamlined legislation and reduced red tape. The Bills create a web of mapping, codes, approvals and tiers for various categories of land clearing. It puts additional burdens on land owners to accurately assess and manage biodiversity impacts under self-assessable codes or to pay consultants to apply a new Biodiversity Assessment Method. We also note that one of the key concerns of landholders, that development and land clearing is assessed on a level playing field, has not been addressed in the draft bills. There continues to be a different set of rules for major projects within the proposed new framework.

¹⁸ www.environment.nsw.gov.au/biodiversitylegislation/BLRevTerms.htm

3 THE NEED FOR STRONG BIODIVERSITY CONSERVATION LAWS

Biodiversity is in decline in NSW. When Europeans arrived in 1788 there were an estimated 897 species of native terrestrial vertebrates found in NSW. Since that time 12 bird species (2%) and 25 mammals (9%) have become extinct in NSW. The latest NSW State of the Environment Report (2015) shows that this decline is continuing, with 999 species of plants and animals and 108 ecological communities listed as threatened under NSW legislation¹⁹.

Clearing of native vegetation and the associated destruction of habitat has been identified as the process representing the greatest single threat to biodiversity in NSW²⁰. Land clearing is listed as a key threatening process under both NSW and Commonwealth biodiversity legislation. Protecting habitat and controlling land clearing is therefore essential if further loss of biodiversity is to be avoided. The pressure of an increasing population and economic growth means that land clearing and development impacts on biodiversity are significant.

We are living in a time of rapid climatic change, and considerations of climate change are imperative for effective land management and biodiversity conservation. For example, climate change will disrupt the 'climatic envelope' for many species and in response these species will either alter their distributions to more suitable climatic zones or go extinct. For less mobile species and habitat specialists, connectivity of high quality native vegetation will be key to determining whether they can move in the landscape, and therefore whether they can persist in the face of climate change.

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. In fact, a comprehensive report on ecosystem services and Australian Natural Resource Management stated that: "Protecting as much biodiversity as possible is a wise strategy for managing risks associated with medium-term and long-term climate change and other environmental changes and for keeping future management options open"²¹.

Biodiversity provides ecosystem services such as oxygen, the recycling of nutrients, control of pests and diseases, pollination of crops, regulation of water quality, and exercise of climate controls²². It can also provide genetic resources and opportunities for improved food and medicine production, renewable resources, such as fuel, and building materials and clothing²³; and deliver concrete agricultural sustainability benefits particularly in marginal areas prone to soil loss.

Our current laws, while not perfect, have played crucial roles in the protection of biodiversity in NSW by improving the knowledge about biodiversity; the independent listing of threatened species; creation of an objective test of environmental impacts and use of the 'maintain and improve' test.

¹⁹ NSW State of Environment Report 2015, p 104, www.epa.nsw.gov.au/soe/soe2015/index.htm

²⁰ NSW State of Environment Report 2015, p 114 www.epa.nsw.gov.au/soe/soe2015/index.htm

²¹ Cork et. al. 2007: *Ecosystem services and Australian natural resource management (NRM) futures*: paper to the Natural Resource Policies and Programs Committee (NRPPC) and the Natural Resource Management Standing Committee (NRMSC)

²² EDO and Nature Conservation Council (2006) *The Status of Biodiversity Conservation in New South Wales and recommendations for reform*, citing "Biological Diversity Advisory Committee, A National Strategy for the Conservation of Australia's Biological Diversity – Draft for Public Comment, AGPS, 1993 in Gerry Bate, 2006, *Environmental Law in Australia*, 6th Edition, Lexis Nexis, Butterworths Australia.

²³ Ibid.

Our own research shows that:

- The *Native Vegetation Act* 2003 in particular has led to over 4 million hectares of native vegetation on farmland actively managed through property vegetation plans²⁴.
- Land clearing has declined by about 40%. Before the *Native Vegetation Act* 2003, more than 17,500ha/year of bushland was being destroyed in NSW.²⁵ Under the *Native Vegetation Act* (2006-2011), that figure fell to about 10,000ha/ year²⁶.
- About 1.16 million native mammals have avoided death over 10 years. WWF has calculated that 116,000 native mammals have avoided death due to agricultural clearing each year since the introduction of the Act²⁷.
- Australian greenhouse gas emissions from Land Use, Land Use Change and Forestry (LULUCF) - the sector that includes tree clearing -almost doubled between 2012–2015 from 13 Mt CO₂e to 23 Mt CO₂e, while emissions from almost all other sectors declined. This follows the substantial weakening of state tree clearing regulations in Queensland²⁸. A similar result is expected if land clearing laws are weakened in NSW.

In our view, key criticisms of the existing laws have more to do with failed implementation, rather than the specific provisions of the laws. Previous allocations of funding to support private land conservation have dwindled, and inequities in the rules applying to farmers, developers and industry were not addressed, as had been intended²⁹.

With ongoing loss of biodiversity across the State, the review of biodiversity laws is timely because there is an urgent need to strengthen them. It is therefore extremely disappointing that this current review of biodiversity laws in NSW is nothing more than a political exercise to address the self-serving interests of a minority of NSW landholders and not the broader public interest.

²⁴ Total Environment Centre, *Laws for the bush - Benefiting biodiversity and people* (2014) - www.tec.org.au/images/reports/LFTB_Report_Web.pdf

²⁵ WWF (2016), *Land clearing & biodiversity, NSW, 2010-15*,

²⁶ WWF, *Native wildlife at risk if NSW Native Vegetation Act is repealed*, (2015)

www.wwf.org.au/news_resources/resource_library/?12820/Native-wildlife-at-risk-if-NSW-Native-Vegetation-Act-is-repealed

²⁷ WWF, *Native wildlife at risk if NSW Native Vegetation Act is repealed*, (2015)

http://www.wwf.org.au/news_resources/resource_library/?12820/Native-wildlife-at-risk-if-NSW-Native-Vegetation-Act-is-repealed

²⁸ *Climate Change and Australia's Tree Clearing Crisis* - The Wilderness Society (2016) - [Link](#)

²⁹ See Wentworth Group of Concerned Scientists, Submission to Biodiversity Legislation Review Panel, September 2014, <http://wentworthgroup.org/wp-content/uploads/2014/10/Submission-to-Native-Vegetation-Review-Final-September-2014.pdf>

4 RESPONSE TO KEY ELEMENTS OF THE REFORM PACKAGE

4.1 GOVERNMENT CONSULTATION

The draft Bills represent the most significant changes to biodiversity conservation in a generation. The change will have significant implications for the environment and communities right across NSW. We are concerned that the government consultation process has been flawed and the broad community, including landholders and environment groups have struggled to understand the proposed changes and engage in the consultation period.

The Government's consultation website and consultation material is difficult to understand and navigate. There are numerous links and documents, and no clear upfront itemisation of all the material that is on exhibition. It is unclear that there is different material for each key theme and different submission guides. Consultation questions are spread across various documents, but are on a limited number of issues.

The lack of information in relation to key elements of the reform package has made it difficult for people to understand the implications of the proposed changes. Key elements that would provide important protections such as the definition of 'serious and irreversible impacts' and the proposed mapping of land as either regulated or unregulated are of particular importance to our members. In urban areas there remain many uncertainties about how the new State Environmental Planning Policy will apply, creating significant concern within those communities. We have been unable to answer many of our members concerns due to lack of information.

Throughout the eight-week public comment period our organisations have held numerous community meetings across NSW to gauge the views of attendees and encourage their engagement in the consultation period. We also attended a number of sessions run by the Government and NSW Landcare. The feedback from the meetings has been of extreme concern both at the likely impacts of the proposed changes as well as the few opportunities for public engagement in the process to date.

We have received feedback from community members who have attended the information sessions hosted by the Office of Environment and Heritage. Overall the feedback provided was that the information sessions were not very effective in supporting attendees to understand the legislation or what the changes would mean. We were told that attendees were not given an overview presentation of the changes; rather they were required to ask specific questions if they wanted to find out about what was included in the legislation or the projected implications of the changes. This makes it difficult for the community to have an overall understanding of the proposed changes and to know what questions to ask. Further, there was no opportunity for any exchange from the floor or facilitation of discussion of divergent views. Based on the feedback we have received we are concerned that the information sessions were not genuine opportunities for consultation and we would have little confidence of any reports or conclusions drawn from the sessions.

An additional hurdle to the community having a say in the changes is the lack of an email address through which to lodge submissions. Some people find it difficult to navigate the Government's website and upload submissions and it would be much simpler to provide an email address for the community to use.

Finally, given the complexity of the draft legislation and poor consultation process, the eight week consultation period has been far too short to allow genuine and meaningful consultation.

By placing such obvious barriers to the community members who wish to engage with these significant changes, the Government makes it more difficult to come to agreement on the legislation, which is not in the best interests of nature conservation nor land management.

4.2 OBJECTS OF THE NEW ACTS

When looking at the proposed objects of the draft Biodiversity Conservation Bill 2016, there is a recognisable shift away from genuine biodiversity conservation to managing biodiversity within a framework of facilitating development and agricultural activities. This shift is also reflected in the specific provisions of the Bill.

In particular we note that:

- The decision to remove the key objective of ‘improving or maintaining biodiversity’ is a significant backward step. There is no equivalent overarching goal for biodiversity conservation within the proposed new legislation.
- There is repetition within the objects, with both the introductory text of clause 1.3 of the draft Biodiversity Conservation Bill and clause 1.3(b), referring to ecologically sustainable development. It is unclear how the two references should interact. There is also repetition of the lettering in clause 1.3 – there is a list 1.3 (a) to (c) followed by another list 1.3 (a) –(i).
- As outlined above, despite ‘lip-service’ in the objects of the draft Biodiversity Conservation Bill, we do believe the reform package is consistent with the principles of ecologically sustainable development. The fact that the reform package contradicts science, facilitates increased land clearing, fails to protect environmentally sensitive areas and does not adequately address climate change impacts is in direct contradiction to the proposed objects of the Bill, and in particular the principles of ESD.

4.3 NATIVE VEGETATION REGULATORY MAP

We have serious concerns about the approach of classifying land based on remote sensing data. We know that a similar approach in Queensland has led to a huge increase in clearing, much of this accounted for by clearing of high value regrowth on ‘Category X’ land (equivalent to Category 1 unregulated land in NSW). We can therefore expect this categorisation to result in a similar pulse of land clearing in NSW. The binary classification of land in this way ignores the fact that regrowth may have significant biodiversity values. We believe that on-farm consultation with professional ecologists and the production of farm plans to guide clearing and restoration—as occurs under the *Native Vegetation Act*—is a more appropriate and supportive way of managing land.

One of the goals of the reforms and the Native Vegetation Regulatory (NVR) map was to create certainty for developers. The failure to include a third category of land in the NVR map—land off limits to development due to its biodiversity value—has meant that there is no certainty as to the protection of high biodiversity value land. The Wentworth Group of Concerned Scientists highlighted this failure in their letter to MPs dated 23rd May 2016. This is a missed opportunity to protect high ecological value land and to protect Matters of National Significance (i.e. ecological communities and threatened species habitat

listed under the *Environment Protection and Biodiversity Conservation Act, EPBC*). Ramsar wetlands are the only explicit interaction of the NVR map with the EPBC Act, yet we know that there are numerous woodland communities that are EPBC listed and which will be eligible for clearing under codes. Several woodland ecological communities now exist largely as either scattered trees or clumps of trees of <1ha (Gibbons and Boak 2002) which now puts them on the path to extinction via the new laws.

In reality, the only certainty that this mapping approach brings is certainty that government will come under increasing pressure to approve inappropriate development as developers have been sent a clear message that nothing is off limits. This impression is reinforced by the limited use of red flags in the biodiversity assessment methodology and the ability of developers to pay into a fund to offset development if they are unable to find a suitable offset.

Unfortunately, the self-assessable codes which apply to Category 2 (regulated land) means that Category 2 land does not in practice receive much more protection than Category 1. This is because the application of the Codes result in the remapping of Category 2 land into Category 1. For example, the equity code permits a maximum of 500ha of clearing of native vegetation in a three year period, after which time the cleared land is mapped Category 1.

Because of the self-assessable codes and the failure to map Category 3 land (off limits) the NVR Map acts solely as a tool to monitor clearing rates. And because the application of codes requires notification but not a site visit from an ecologist, the NVR map effectively replaces on-ground ecological assessment for all but the largest developments which would follow the Biodiversity Assessment Methodology (BAM) pathway. This is extremely concerning as, although the maps appear effective at identifying woodland cover, they are ineffective at identifying vegetation quality or Plant Community Types. Hence it is not possible to assess the quality of vegetation being proposed to be lost to development. This in turn means that offsetting clearing will in many cases be meaningless as there is no baseline against which to assess the success or failure of the offset.

Because most development on agricultural land is likely to be covered by codes the majority of developments across NSW will receive no on-ground professional assessment prior to clearing. This means that the public will have no knowledge of the quality of native vegetation that has been removed and, because the codes are self-assessable, no confidence in what type of vegetation is being lost.

Wetlands and grasslands

The data sources that go into developing the NVR map appear reliable and extensive. However, we note that grasslands and wetlands are problematic for remote sensing mapping methods. It is not clear to us from the mapping statement the degree to which the maps accurately capture these two broad community types and, in the case of wetlands, discriminate between the four different ALUM wetland classes listed in the mapping statement. In addition, the mapping statement states that 2ha is the minimum mapping unit for ALUM classification units. This is likely to result in significant oversights of wetland communities. For example, the critically endangered EPBC listed wetland community 'Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains'³⁰ occurs in the Riverina bioregion. Because the Riverina is a highly cleared area, remaining examples of the community will be mostly small and fragmented in distribution. The limitations of wetland mapping means that the community will almost certainly be mapped incorrectly and classed as Category 1 which will allow clearing. Furthermore, this

³⁰ www.environment.gov.au/biodiversity/threatened/communities/pubs/97-listing-advice.pdf

community is ephemeral and will therefore only be detected in winter after rainfall events. This is but one example of how the new legislation completely fails to take account of matters of national environmental significance.

In regards native grasslands we do not have confidence that the proposed NVA map will accurately identify native grasslands. The mapping statement states that 'improved pastures generally have a greater proportion of green cover when compared to native pastures'. This is not a statement that inspires confidence that grasslands will be accurately mapped. Given native grasslands are now very rare in the landscape, they should be a priority for conservation. As a further example of how the new laws potentially clash with the *EPBC Act*, native grasslands in the Riverina are some of the last remaining habitat for the critically endangered Plains Wanderer. A failure to map accurately map grasslands could further reduce the already scarce habitat for this species.

The identification of ecological communities via the maps

Clause 60H(2) in the Local Land Services Amendment Bill 2016 states that land will be mapped Category 2 if it has been mapped by the agency head as containing a critically endangered ecological community. No information is provided in the mapping statement as to how these communities will be mapped for their inclusion in Category 2.

Unfortunately, given the history of mapping in OEH, this is cause for extreme concern that segmentation mapping will be the tool used to identify these communities. Segmentation mapping has been shown to be highly inaccurate in identifying Plant Community Types (PCTs), including woodland PCTs (Hunter 2016). As a result of these inaccuracies, a reliance on segmentation mapping to identify ecological communities is likely to result in serious error, including both false positives and false negatives. False positives will result in landholder uproar, while false negatives will result in the loss of highly threatened ecological communities. Segmentation mapping is therefore not an appropriate mapping method for identifying ecological communities for inclusion in Category 2. Furthermore, we note that segmentation mapping will be available to assessors as a source of information for assessments conducted via the BAM pathway. Given the documented inaccuracies of this mapping method (see **Appendix 1**) we do not have confidence that this will lead to good environmental outcomes.

Revision of mapping

We do not support the proposal that there be no mechanism for members of the public, including neighbouring landholders, to challenge the maps. As it is only landholders who can comment on their own parcels of land, the inevitable result will be an erosion of Category 2 land into Category 1 as landholders seek to reduce their compliance burden. Given that taxpayers are to subsidise private land conservation efforts to offset clearing, it is our view that taxpayers also receive the right to challenge maps. This is particularly important to ensure that set-asides and offsets funded by public money are afforded adequate protection.

4.4 LAND MANAGEMENT ACTIVITIES

4.4.1 DEFINED ALLOWABLE ACTIVITIES

It is our understanding that 'allowable activities' under the new regime are intended to reflect existing routine agricultural management activities. We are of the view that the existing routine agricultural management activities are already excessive, allowing a substantial amount of clearing of vegetation without oversight or approval, and that the revision of 'allowable activities' permits an excessive level of vegetation clearing.

We are particularly concerned that:

- The LLS have the ability to increase maximum distances allowed under these activities. This introduces an unacceptable degree of discretion and lack of accountability.
- The draft legislation provides no mechanisms for tracking the cumulative effect of clearing under these allowable activities at either a property or regional scale. Nor are there adequate mechanisms to prevent the misuse of allowable activities to conduct clearing by stealth or to protect endangered ecological communities and threatened species habitat.
- There have been changes to thresholds and definitions in the revision of allowable activities, which are likely to lead to a greater amount of clearing), for example:
 - Clearing of native vegetation for construction timber was for the purpose of construction or maintenance of rural infrastructure on that land. The operation of that infrastructure has now been added. This may allow clearing of timber to feed machinery infrastructure such as boilers.
 - The maximum distances now allowed for clearance from power lines has been doubled comparative to that allowed under the *Native Vegetation Regulation 2013*.
 - Whilst the *Native Vegetation Regulation 2013* prescribes maximum clearing distances and areas for specific activities within the Western Division, Coastal and Central Regions, the draft LLS Bill applies a general maximum clearing distance/area for the overall zones (Central, Coastal and Western). This practical implication of this is increased threshold distances in some cases, for example, currently clearing from a water point in a coastal region is limited to 3m from the outer edge of the structure, whereas under the proposed LLS Bill it is extended to 15m.
- Changes in the language relax the parameters of 'allowable activities', for example:
 - Clause 27(5)(c) of the *Native Vegetation Regulation 2013* enabled the Minister to increase the clearing distance specified for a particular piece of infrastructure provide the proposed increase was *necessary* in the circumstances. Now it only has to be *reasonable* in the circumstances before LLS can increase the distance by certificate (Proposed Schedule 5A of the Local Land Services Act, clause 9(2)(b)).
 - Clause 27(5)(a) of the *Native Vegetation Regulation 2013* states that the clearing distance for a particular piece of infrastructure could be increased only if the Minister is satisfied that the

proposed increase is minor. This has been changed in the Bill to LLS being able to increase the distance if the *environmental impact* of the increase would only be minor. This could enable much more extensive clearing if LLS determines that it would only have minor impact. It is unclear what criteria will guide what is above minor environmental impact (Proposed Schedule 5A of the Local Land Services Act, clause 9(2)(c)).

4.4.2 LAND MANAGEMENT CODES

The NSW Government is proposing significant changes to land clearing rules under the proposed changes to biodiversity and land clearing laws. These changes will allow for a broader range of activities to be carried out under land clearing codes. The exact wording of the codes is not yet available. It is a shame the Government chose not to release the detail of the codes to the public, as the information on exhibition suggests a remarkable degree of clearing may occur via the codes.

The increase in the number of codes, and the type of clearing permitted by those codes, closely reflects the approach taken to vegetation management by the Newman Government in Queensland, although NSW proposes two additional codes that Queensland does not possess (Table 1).

Under the new regime, land clearing in areas marked as 'Regulated Land (Yellow - Category 2)' on a new Native Vegetation Regulatory Map can be undertaken as 'code-based' if it meets the requirements of new land clearing codes. The clearing will require either notification or certification with the Local Land Services (LLS), however the LLS cannot reject clearing applications that are consistent with Codes. Certification and notification therefore will not act to avoid clearing, rather simply provide mechanisms to monitor how much clearing is occurring.

Given the potential impacts of land clearing activities on biodiversity, soil, water quality and salinity, the Minister for the Environment must have a greater role in overseeing land clearing activities, including in relation to regulation and enforcement.

GENERAL COMMENTS ON LAND CLEARING CODES

Below we outline a number of our overarching concerns with the proposed Land Management Codes:

Lack of protection for endangered ecological communities

- Clearing of endangered ecological communities (EECs) is allowed under land management codes. It is simply extraordinary that code-based clearing of EECs could be permitted.
- There are 'set aside' requirements if EEC's are to be cleared, and an additional 50% loading applies if thresholds of EEC clearing are undertaken (4 ha in the Western Zone, 3 ha in the Central Zone, 2 ha in the Tablelands Zone and 1 ha in the Coastal Zone). Ultimately however, the codes allow for the clearing of EECs, without a proper assessment of impacts.
- Given their important conservation values, EECs should be protected from clearing; especially self-assessed 'code-based' clearing.

Key Threatening Processes

- Clearing of paddock trees, islands and peninsulas of native vegetation will be expanded under the new codes
- Code-based clearing will therefore directly exacerbate the Key Threatening Processes 'clearing of native vegetation', 'loss of hollow-bearing trees' and the 'removal of dead wood and trees'.

Lack of protection for threatened species habitat

- Clearing of threatened species habitat under the codes will be permitted if the threatened species present are not 'site managed' species in the NSW 'Saving our Species' program. This means that 55% of all threatened species in NSW will be at risk of having habitat cleared under the codes.
- Codes will permit clearing of Koala habitat if it is not designated 'core' Koala habitat.
- No clearing of threatened species habitat should be allowed under land management codes.

Set-aside rules

- Land management codes may require set aside areas to be created to offset the impacts of clearing, however 'set-aside' rules are not as stringent as best practice offsetting requirements. The end result will be a loss of biodiversity as a result of code-based clearing.
- In particular, set-asides need not be of equivalent quality to the area being cleared and may include rehabilitation/revegetation of Category 1 land (i.e. revegetation and rehabilitation can be used as a substitute for remnant vegetation). This violates the principle of 'no net loss' and assumes—often unrealistically—that revegetation efforts are successful.
- Set-asides also suffer from time-lags: that is to say the replacement of larger trees (such as paddock trees) with smaller ones will not provide similar habitat for many years. For example, large tree hollows may take centuries to form.
- The set-aside ratios and effectiveness in achieving conservation gains also rely on the accurate identification of the vegetation to be cleared. The NVR map does not contain information on Plant Community Types, and clearing via codes does not require a site visit. It is therefore unclear what sources of information are to be used by landholders. We have grave concerns that OEH's segmentation mapping will be one of these tools: this mapping has been shown to be unfit for use in accurately identifying native vegetation, a point we have made clear to OEH and which we make again in the attached document 'The Segmentation Saga' (see **Attachment 1**).
- Although the Draft Biodiversity Conservation Bill 2016 allows the Minister to direct a person to retire credits in the event a management action is not carried out in accordance with the stewardship agreement (Division 5, biodiversity offsets enforcement order), there is very little detail on how, in practice, stewardship agreements will be monitored for compliance. For example, it is unclear as to how frequently offset sites will be visited, what will be the requirements should set-asides fail to become established and how management actions under a stewardship agreement will be monitored.

Scale of Clearing and Cumulative Impacts

- While the exact content of the Codes is not yet available, information currently on exhibition suggests that the scale of clearing allowed under the codes is significant. For example, 75% of the benchmark density for the highest density formation can be cleared for thinning purposes, 90% of 'invasive native species' in a 1000 hectare area can be cleared, up to 50% of the total area of mulga and its variants on any landholding within any 10 year period for the purpose of stock fodder, and up to 500 ha of native vegetation can be cleared under the equity code in any three-year period.
- There are insufficient safeguards in the codes to prevent multiple applications of the codes and substantial incremental clearing. For example, under the equity code, up to 500ha of native vegetation can be cleared in any three-year period.
- There are also insufficient mechanisms in place to monitor and limit the wide-spread application of the codes across the landscape.

Application of the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999

- There is discrepancy between the proposed codes and protections under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act), and no information as to how the NSW regulations will ensure compliance with the EPBC Act.
- The expected impacts of the reforms—increased land clearing and fragmentation—directly undermine recovery actions for a host of EPBC listed threatened flora and fauna.
- There may be circumstances where NSW codes allow for the clearing of native vegetation that is listed as an endangered ecological community under Federal laws.
- This is particularly likely in the wheat-sheep belt where many remnant woodland patches are ecological communities of national environmental significance, but clearing could occur for a range of species or ecological communities under the codes.
- This may put NSW landholders at risk if they are unaware of Commonwealth laws, and the need to obtain Commonwealth approval prior to clearing.

SPECIFIC COMMENTS ON THE PROPOSED NEW CODES

The material released for public comment indicates there will be four types of land management codes: Management Codes, Efficiency Codes, Equity Codes and Farm Planning Codes. Again, the Codes are not currently available for public comment however we provide the following feedback on the information that has been provided to date:

Name of Code	Key Features	Key Concerns
Management Codes	Codes for: <ul style="list-style-type: none"> - Thinning vegetation - Managing invasive native species (INS), - Harvesting vegetation for stock fodder and controlling lignum in an irrigation district 	<ul style="list-style-type: none"> • These codes, as they currently exist in the Native Vegetation Regulation 2013 have already weakened protection for native vegetation and provided increased flexibility for clearing³¹.
Efficiency Codes	Codes which allow removal of vegetation to allow more 'efficient' grazing, cropping and farm systems	<ul style="list-style-type: none"> • These codes facilitate the removal of single paddock trees, groups of trees and clumps of vegetation. They permit the removal of larger paddock trees than currently permitted under the current 'RAMA'. • The 'Cropping Efficiency Code' allows Category 2 land that is wholly or mostly surrounded by Category 1 land to be cleared. This means that Category 2 land wholly or mostly surrounded by Category 1 land is effectively unprotected. It's really de facto Category 1 land. • The 'Grazing Efficiency Code' allows trees and clumps of vegetation to be if they are surrounded by grazing land. It also allows clearing of 'treatment areas' which can total 30% of properties more than 100 hectares in size. • Category 2 land that is cleared under the Cropping Efficiency and System Efficiency codes is remapped to Category 1 land. Category 2 land can therefore be

³¹ Refer to Joint Submission on the Native Vegetation Self-Assessable Codes of Practice, May 2014, www.nature.org.au/media/1887/140526-sb-submission-on-the-native-vegetation-draft-self-assessable-codes-of-practice-ncc-tec-mpa-tws-wwf.pdf

		<p>converted to Category 1 land by code-based clearing; severely compromising the integrity of the Native Vegetation Regulation Map.</p> <ul style="list-style-type: none"> • The 'System Efficiency Code' allows 'clearing to enable more efficient farm management'. This includes EECs. The only restrictions to where this code can be used are that it cannot be applied to small holdings or to properties within 50km of the coast unless LLS is satisfied that the primary use of the land is agriculture. However, land use may change in the future and once cleared there would be fewer hurdles to subdividing and developing the land. • It should be noted that many woodland communities now exist largely in fragments less than 1ha in size. These communities will be particularly vulnerable to destruction under the efficiency codes.
Equity Code	<ul style="list-style-type: none"> • Properties with a higher proportion of remnant native vegetation are afforded greater flexibility. Clearing using this code is 'balanced' by the creation of permanent set aside areas elsewhere on the property. 	<ul style="list-style-type: none"> • Allows for broad-scale land clearing. • Allows code-based clearing where other codes would not apply. • Allows code-based clearing of EECs. • Allows the greater of '25% of the maximum permitted under the code up to a maximum of 500 hectares' OR 100 hectares. This means a landholder can clear at least 100 hectares every three years. • Cannot be applied to properties within 50km of the coast unless LLS is satisfied that the primary use of the land is agriculture. However, land use may change in the future and once cleared there would be fewer hurdles to subdividing and developing the land. • The creation of set-asides do not avoid a net loss of vegetation, and in any case are not permanent.
Farm Planning Code	<p>Allows a landholder to clear the regulated vegetation on their property in exchange for establishing permanent set aside areas to undertake strategic revegetation that maximises biodiversity.</p>	<ul style="list-style-type: none"> • Suggests that a landholder can simply recreate vegetation of a higher standard • Connectivity is the only vegetation attribute considered • Cores and corridors can be created or improved by simply restoring vegetation. 'Redistribution' (i.e. clearing) of native vegetation is not required. • Revegetation need not be of equivalent standard to the vegetation being lost. It only needs to be of equal or better standard for the region. Vegetation lost might be some of the highest standard, highest conservation value in the region and thus impossible to replicate. • It may take decades (if ever) for revegetation to be of equivalent quality (e.g. hollow bearing) to the vegetation being lost under this code • Category 2 land cleared under this code is converted to Category 1 land; severely compromising the integrity of the Native Vegetation Regulation Map.

4.4.3 LAND CLEARING APPROVAL

In the event that land clearing on regulated land (Category 2 – yellow) cannot be carried out as an ‘allowable activity’ or in accordance with Land Management Codes, an application must be made to the Primary Industries Minister for approval to clear vegetation (clause 60BB, Local Land Services Amendment Bill 2016). A biodiversity assessment report must be prepared in accordance with the proposed Biodiversity Assessment Method.

We do not believe this approach is consistent with the Independent Panel’s recommendation to integrate the assessment and approval of all forms of agricultural development that involve clearing of native vegetation into the *Environmental Planning and Assessment Act 1979*³². Even though the Biodiversity Assessment Method will apply, it will be applied under different legislation and with a different decision maker.

Further, we do not think the Minister for Primary Industries is the appropriate person to be making decisions about biodiversity. Although the Minister is required to provide the Environment Agency Head with a copy of the biodiversity development assessment report, this is only for the purpose of reporting. There is no requirement to seek or follow advice from the relevant Environment Agency Head or Environment Minister and there is significant discretion for the Primary Industries Minister to reduce biodiversity credit requirements (Clause 60CC, LLS Amendment Bill).

4.5 NATIVE VEGETATION CLEARING IN URBAN AREAS AND OTHER AREAS

The urban environment needs more trees – not less. Urban vegetation has high biodiversity and amenity values. It provides important food and shelter to wildlife, and shade, heat reduction and aesthetic benefits for the community. The ongoing destruction of century old heritage trees in Randwick has rightly sparked outrage in the community. There are other examples of widespread destruction of native vegetation in urban areas, such as the 10/50 rule permitting tree removal under the guise of reducing bushfire risk, as well as new housing and infrastructure development.

The public consultation material explaining these components of the reform package is disjointed and difficult to understanding. While most rural land clearing will be dealt with under amendments to the *Local Land Services Act*, clearing in urban areas, and most environmental zones, will be dealt with under *the Environmental Planning and Assessment Act 1979* and a new State Environmental Planning Policy (SEPP). It is proposed that existing local council tree preservation orders will be replaced by the new SEPP.

Our understanding of how the new regime is intended to operate is set out in the table below:

Consent requirements	What rules will apply?	Decision maker
Development that is permissible without consent under the <i>Environmental Planning and Assessment Act 1979</i>	New State Environmental Planning Policy: It is expected that a new SEPP and DCP framework will regulate clearing that is permitted without consent. The contents of the new SEPP are not yet known. The new SEPP is expected to have three categories:	
	Clearing of native vegetation that does not require approval	n/a
	Clearing of native vegetation that may be carried out with a permit. On certain land (generally within R5 and E zones) a	Feedback is being sought on whether

³² Independent Biodiversity Legislation Review Panel *A review of biodiversity legislation in NSW – Final Report*, December 2014, Recommendation 1(d).

	permit may require on-site biodiversity impact mitigation strategies (eg. carrying out of management actions)	permits will be granted by the LLS or local council
	Clearing of native vegetation that may only be carried out following a Biodiversity Assessment Methodology assessment and approval	Approval will be given by the Minister for Primary Industries
Development that requires development consent under the <i>Environmental Planning and Assessment Act 1979</i>	Development approval processes under the Environmental Planning and Assessment Act applying the new Biodiversity Assessment Methodology, allowing the use of weakened offset rules and supplementary measures.	Local Council or Minister for Planning

We have a number of initial concerns with proposed framework for regulating tree clearing in urban areas under the new regime:

- Key information about the new SEPP is not available and therefore it is difficult to provide feedback on this important aspect of the reforms. It is important that further consultation with councils and the community is carried out as the new SEPP is developed.
- As outlined below, we have significant concerns with the proposed new Biodiversity Assessment Methodology. Its application to general Part 4 development in urban areas is likely to increase impacts on biodiversity because it relaxes biodiversity offsetting rules. In many urban areas there are simply no 'like for like' offsets available. Remnant bushland and wildlife habitat represents the last vestiges of what was once present. Rather than protecting those areas, the new offsetting rules will allow proponents of development to vary like for like offsetting rules or use supplementary measures to satisfy offset requirements, and ultimately clear the land for development.
- Most local councils have a long history of managing local trees under existing tree preservation orders. There has been no explanation of why this framework needs to change, or why it has been suggested that the Local Land Service should be responsible for granting permits.
- Many councils protect both native and exotic plant species in their local areas. It is unclear whether the new rules will extend to exotic species.

4.6 TEST OF SIGNIFICANCE

There is some confusion within the community about how the 'test of significance' - used to determine whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats - interacts with the proposed new Biodiversity Assessment Method, and when a species impact statement will be required. There is also some confusion about what biodiversity assessment requirements are applicable to activities under Part 5 of the *Environmental Planning and Assessment Act 1979*. The explanatory information provides very little guidance in this area.

Our understanding is that if after applying the 'test of significance' a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats, the application must be accompanied by a species impact statement. However, if the BAM thresholds are triggered then a

biodiversity development assessment report is required (see clause 7.7 draft Biodiversity Conservation Bill 2016) and the requirement that a species impact statement assess the impact on biodiversity values may be satisfied by the assessment in a biodiversity development assessment report.

We note that 'test of significance' has been modified under the proposed new system (c.f. section 5A of the *Environmental Planning and Assessment Act 1979* and clause 7.3 Draft Biodiversity Conservation Bill 2016), and standards appear to have been reduced. In particular, we are concerned that:

- Consistent with the broader changes that remove the ability to list endangered populations, the test of significance relating to these populations has been removed. This is not supported.
- The requirement to consider whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process has been removed. It is unclear why this part of the 'test of significance' has been removed given that key threatening processes remain part of the proposed new regime.

4.7 BIODIVERSITY ASSESSMENT METHOD

The *Draft Biodiversity Assessment Methodology* carries over many of the criticised elements of the *NSW Biodiversity Offsets Policy for Major Projects*. Key concerns with the *Draft Biodiversity Assessment Methodology* are outlined in more detail below. We note that the one of the key justifications for the reforms, that development is assessed on a level playing field, has not been implemented in the draft bills. A large proportion of development in NSW is now likely to be conducted under self-assessable codes meaning there is very little transparency or public accountability applied to future development.

The *Draft Biodiversity Assessment Method* demonstrates a significant shift away from best practice offsetting rules, towards a more flexible system that allows decision makers to vary rules and proponents to move through various options until they can simply discharge offset obligations by paying money into a fund and ultimately proceed with development. As Gibbons and Eyre conclude '(i)n effect, the BAM outlines conditions of consent rather than an offsetting scheme'³³.

Independent reviews by leading scientists and submissions by experts including the NSW Scientific Committee and the Australian Network of Environmental Defenders Offices continue to raise concerns with the changes to biodiversity offsetting policy settings in NSW, including variations to like for like offsetting, supplementary measures and mine rehabilitation, however these concerns continue to be ignored.

In our view the *Draft Biodiversity Assessment Method* will not deliver environmental outcome for NSW. It will simply make it easier for unsustainable development to continue to destroy important vegetation, water resources and soil right across the NSW landscape.

³³ Gibbons P and Eyre T (2015) Draft Independent review of the Biodiversity Assessment Methodology, October 2015, <https://biodiversity-ss.s3.amazonaws.com/1461934376/peer-review-combined.pdf>

KEY CONCERNS WITH THE *DRAFT BIODIVERSITY ASSESSMENT METHOD*

1. There is no clear objective to protect biodiversity or achieve net positive outcomes

The *Draft Biodiversity Assessment Method* does not include a clear objective to protect biodiversity or achieve net positive outcomes.

Currently, both the *Environmental Outcomes Assessment Methodology* under the *Native Vegetation Act* 2003, and the Biodiversity Certification provisions under the *Threatened Species Conservation Act* (1995) are underpinned by an objective to ‘maintain or improve biodiversity’³⁴.

This objective is not carried over, nor is there an equivalent or replacement standard, in the *Biodiversity Conservation Bill* 2016 or *Draft Biodiversity Assessment Methodology*.

There has been criticism of the failure of Government to establish a clear objective in its newest offsetting methodologies:

- In reviewing the *NSW Biodiversity Offsets Policy for Major Projects and Framework for Biodiversity Assessment*, Maron and Gordon (2014) recommended that the net ecological outcome, or standard, must be explicitly stated, in order to improve clarity and transparency³⁵.
- In reviewing the *Draft Biodiversity Assessment Method*, Gibbons and Eyre (2015) raised concerns that the standard against which an impact is judged remains unclear. They noted that ‘improve or maintain’ has been removed from the new policy, but there is no explicit standard to replace it. They recommend that a standard is necessary in order to (1) guide development of the methodology and (2) provide an explicit target against which the policy can be evaluated, and modified if necessary³⁶.

We note the Government has made a number of commitments to achieve a ‘net positive standard’³⁷ and ‘enhance biodiversity’³⁸. These commitments should inform a clear objective in the *Biodiversity Conservation Bill* 2016 and the underpinning *Biodiversity Assessment Method*.

2. The *Draft Biodiversity Assessment Method* does not assess impacts on water quality, salinity or soil quality

The *Environmental Outcomes Assessment Methodology* under the *Native Vegetation Act* 2003 recognises the complexity of biological diversity and its importance in maintaining healthy ecosystem services, and provides a mechanism for assessing a broad range of biodiversity values including water quality, salinity and soil.

³⁴ See section 3(b) of the *Native Vegetation Act* 2003 and the *Environmental Outcomes Assessment Methodology* (www.environment.nsw.gov.au/resources/vegetation/130788EOAMNVR13.pdf); see also sections 126O and 126P *Threatened Species Conservation Act* 1995

³⁵ Maron, M and Gordon. (2014) *A Peer Review of the Draft Framework for Biodiversity Assessment for Assessing and Offsetting State Significant Development and State Significant Infrastructure in New South Wales*, Recommendation 4

³⁶ Gibbons P and Eyre T (2015) Draft Independent review of the Biodiversity Assessment Methodology, October 2015, p4 <https://biodiversity-ss.s3.amazonaws.com/1461934376/peer-review-combined.pdf>

³⁷ Media Release, *Boost for Biodiversity, New fund to support the environment*, Robyn Parker MP, Minister for the Environment and Minister for Heritage, 20 July 2013, www.environment.nsw.gov.au/resources/MinMedia/MinMedia13072001.pdf

³⁸ *Memorandum of Understanding between NSW Liberals & Nationals and NSW Farmers* dated 25 March 2015, https://d3n8a8pro7vhmx.cloudfront.net/nationaltest/pages/458/attachments/original/1427316697/Memorandum_of_Understanding.pdf?1427316697

At this stage the *Draft Biodiversity Assessment Method* only covers a limited scope of biodiversity values, including vegetation integrity and habitat suitability. While there is scope for the Biodiversity Conservation Regulation to prescribe other values, the *Draft Biodiversity Assessment Method* is currently limited in its application. The Independent Panel's Review implicitly stated that other indices, such as the potential for land degradation, be included in the development assessments³⁹.

3. Limits on biodiversity offsetting ('red flag' areas) in the *Draft Biodiversity Assessment Method* are limited and uncertain

Best practice offsetting recognises there are limits to what can be offset. In some circumstances residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected. That is, the vegetation or species in question is so threatened that it is simply impossible to offset. These may include areas of high conservation value, environmentally sensitive areas and endangered ecological communities.

In these areas, where offsetting is not an appropriate solution, a 'red flag' should be triggered and development refused on the grounds of unacceptable environmental impact. The concept of red flags, particularly for endangered ecological communities, populations and species, and their habitats, is supported by scientists and conservationists⁴⁰.

Red flags currently feature in a number of NSW biodiversity offsets policies:

- The *BioBanking Assessment Methodology* 2014 triggers a red flag when the development will have an adverse impact on a defined red flag area⁴¹.
- The *Biodiversity Certification Assessment Methodology* 2011 triggers a red flag of development directly impacts on biodiversity values in a red flag area, as defined in the methodology.
- The *Environmental Outcomes Assessment Methodology* 2013 establishes red flags by identifying specific circumstances where development will not meet the legislative requirement to maintain or improve environmental outcomes.

The new biodiversity conservation package proposes a 'red flag' where there are '*serious and irreversible impacts on biodiversity values*' however there are a number of concerns with the way this will operate in the new system:

- The criteria for defining serious and irreversible impacts and 'red flag areas' have not yet been developed⁴², so it is unclear what areas will be protected as 'red flag areas' under the new framework.

³⁹ Independent Biodiversity Legislation Review Panel *A review of biodiversity legislation in NSW – Final Report*, December 2014, page 36

⁴⁰ For example, the International Union for the Conservation of Nature's Principles for Biodiversity Offsetting recognise that there must be limits to what can be offset; the Nature Conservation Trust considers values such as critically endangered and endangered ecological communities, populations, species (and their habitats) to be values that should be considered for red flag status – Nature Conservation Trust Submission on the Draft NSW Biodiversity Offsets Policy for Major Projects (www.environment.nsw.gov.au/resources/biodiversity/offsets/33NatureConservationTrust.pdf); Bush Heritage Australia supports the use of red flags for ecological communities in NSW that are threatened above a critical threshold – Bush Heritage Australia - Submission on the Draft NSW Biodiversity Offsets Policy for Major Projects (www.environment.nsw.gov.au/resources/biodiversity/offsets/36BushHeritageAustralia.pdf)

⁴¹ See Part 9 of the *BioBanking Assessment Methodology* 2014

⁴² See Appendix 4 of the *Draft Biodiversity Assessment Method*

- It is unclear what, if any, difference there is in establishing a red flag for a ‘serious and irreversible impact’ as opposed to an adverse impact or direct impact. Does the new standard make it harder to trigger red flag?
- In the case of major projects or biodiversity certification, ‘red flags’ can be ignored. The *Biodiversity Conservation Bill 2016* provides that the consent authority must refuse to grant consent under Part 4 if it is of the opinion that the proposed development is likely to have serious or irreversible impacts on biodiversity values (clause 7.17(2)). This provides a ‘red flag’ for general development proposals. However in the case of State Significant Development and State Significant Infrastructure (clause 7.17(3)), and biodiversity certification (clause 8.8) the relevant Minister is only required to take those impacts into consideration. Serious and irreversible impacts do not act as a true ‘red flag’ and development may be able to proceed despite having serious and irreversible impacts on biodiversity.

4. The *Draft Biodiversity Assessment Method* allows variations to ‘like for like’ offsetting

The *Draft Biodiversity Assessment Method* allows for variations to ‘like for like’ offsetting. This fundamentally departs from the principle that offsets should be targeted towards the conservation values being lost.

Broadening offsets to include similar vegetation types in the locality that have been more highly cleared, or by species that are under the same or greater level of threat, will result in a net loss of the impacted vegetation type or species. Although such broad offsetting may yield some conservation outcomes for related vegetation and species, it will ultimately lock in the trajectory of decline for the actual vegetation types and species being impacted.

Scientists and environment groups have raised concerns with the weakening of ‘like for like’ rules⁴³. Together with the introduction of supplementary measures (discussed below), these flexible offsetting arrangements have been highly criticised for fundamentally departing from the key principles of offsetting.

5. The *Draft Biodiversity Assessment Method* allows for the use of Supplementary Measures (Indirect offsets)

The *Draft Biodiversity Assessment Method* allows the use of supplementary measures (now called ‘biodiversity conservation actions’) in place of genuine offsets. However the rules for the use of ‘biodiversity conservation actions’ are still under development, and not available for public comment as part of the *Draft Biodiversity Assessment Method*⁴⁴.

Supplementary measures are a controversial feature of the existing *NSW Biodiversity Offsets Policy for Major Projects* and are a prime example of a perverse outcome of offsetting (Gordon et al. 2015).

⁴³ See, for example, NSW Scientific Committee *Submission on the draft NSW Biodiversity Offsets Policy for Major Projects* (www.environment.nsw.gov.au/resources/biodiversity/offsets/66NSWScientificCommittee.pdf); see also EDO NSW *Submission on the draft NSW Biodiversity Offsets Policy for Major Projects* (www.environment.nsw.gov.au/resources/biodiversity/offsets/62EnvironmentalDefendersOffice.pdf)

⁴⁴ *Draft Biodiversity Assessment Methodology*, clause 10.5.8

These are alternative measures, other than protection and management of land as an offset site, that are known to improve biodiversity values. They may include:

- actions outlined in threatened species recovery programs
- actions that contribute to threat abatement programs
- biodiversity research and survey programs
- rehabilitating degraded aquatic habitat

Critics of 'supplementary measures' are concerned that supplementary measures are not genuine offsets, and that they fail to meet best practice offsetting principles, including that offsets be 'like for like'. For example:

- The Australian Network of Environmental Defender's Offices (ANEDO) has strongly opposed the use of supplementary measures in lieu of offsets⁴⁵. ANEDO notes that supplementary measures will be particularly detrimental for areas where there is no offset available because of the scarcity of the impacted species or ecological community. It constitutes a breach of the like for like principle, and refuses to recognise the red flag principle which protects critically endangered species and EECs.
- The NSW Scientific Committee has raised particular concerns with the introduction of supplementary measures, advising that *'the proposal that a proponent can provide funds for supplementary measures that do not involve protecting and managing a site, or by paying into the Fund, is clearly a case of developers being able to buy themselves out of any obligation to protect biodiversity in any meaningful way. This proposal should be rejected'*.⁴⁶
- Gibbons and Eyre (2015) have raised concerns with the inclusion of supplementary measures in the Draft Biodiversity Assessment Methodology.

Specifically they advise that

"...the assessment methodology is predicated on a policy that, for proposals that are not deemed red light, a decision to approve/reject a development application will not be determined by the capacity of the impact to be offset. Instead, flexibility in the assessment methodology (e.g., relaxing the credit profile ... and supplementary offset measures where sufficient ecosystem credits cannot be found ... can be invoked when it is difficult for a developer to secure an offset, which is unfortunate. We believe these measures will undermine the intent of offsetting to create a price signal for biodiversity based on supply and demand (i.e., a price that reflects the rarity and

⁴⁵ ANEDO Submission to Senate Inquiry into Environmental Offsets, Submission No 60, pp8-9.

ANEDO gives several reasons why the supplementary measures principle should be removed from the NSW Major Projects Offsets Policy:

- The measurement of biodiversity gains is a critical part of a successful biodiversity offsets policy. This is not possible when indirect offsets are employed.
- The uncertainties of research projects must also be considered. Science projects are not always successful. Not only must the project be funded for its entirety, but it must also be scientifically credible, successful in its outcomes and produce results capable of being implemented in the field. If some or all of these factors are not present, then the funding could be wasted and the research will deliver no biodiversity or offset values at all.
- Effective offsets must be additional to activities that would have been undertaken in the normal course of events. It is difficult to demonstrate that indirect offsets comprise the requisite degree of additionality.

⁴⁶ NSW Scientific Committee Submission on the draft NSW Biodiversity Offsets Policy for Major Projects (www.environment.nsw.gov.au/resources/biodiversity/offsets/66NSWSecretariatSubmission.pdf)

capacity for restoration of biodiversity). For example, flexible arrangements in the BAM create an incentive for a developer or their agent to seek relaxation in the credit profile or seek supplementary measures when the offset (or conservation banking) market places a high price on the biodiversity impacted by their proposal (e.g., because the biodiversity being impacted is rare, occurs on land with a high opportunity cost or the impact is difficult to restore). The net effect of which will be a trend towards replacement of biodiversity that costs more to offset with biodiversity that costs less to offset, a reduced incentive to avoid impacts that are costly to offset and a reduced incentive for 3rd parties to establish offsets for these types of biodiversity.”

The NSW Government has provided no justification for allowing variations to like for like’ rules and supplementary measures as part of its biodiversity offsetting framework⁴⁷.

6. The Draft Biodiversity Assessment Method allows mine site rehabilitation to be attributed as biodiversity offset credits

The use of mine site rehabilitation towards the calculation of biodiversity offset credits is controversial and unproven. Numerous critics have raised concerns about the ability to effectively restore degraded land, and whether mine site rehabilitation was ‘additional’ to the obligations of mining companies⁴⁸. Further there are concerns that the mining industry has a very poor record of successfully restoring ecological values during mine site rehabilitation and the NSW Government has a poor track record of monitoring and regulating mine site rehabilitation⁴⁹.

The NSW Scientific Committee has raised concerns with the use of mine sites to generate biodiversity offsetting credits, concluding that ‘it seems highly unlikely that biodiversity credits could be generated through mine rehabilitation and this proposal should be rejected as impractical unlikely to result in biodiversity conservation or improvement.’⁵⁰

In March 2016 it was revealed that the Office of Environment and Heritage had raised concerns that the record of success in biodiversity restoration from the rehabilitation of degraded land (specifically mine sites) is very poor with impacts lasting “multiple decades”, and questioned whether restoration of biodiversity on a degraded site is even possible⁵¹.

Despite ongoing concern around the use of mine rehabilitation to generate offsets credits, it continues to be feature of NSW offsetting policies. Further, once mine sites have been rehabilitated, the land can then be re-credited as an offset site⁵², essentially creating a ‘double dipping’ offset credits for that land.

⁴⁷ In response to Gibbons and Eyre, OEH concludes that *OEH is cognisant of this feedback and will ensure its consideration in further BAM development. OEH response to the Independent Review of the Biodiversity Assessment Method* (undated), <https://biodiversity-ss.s3.amazonaws.com/Uploads/1462247273/OEH-response-to-the-BAM-Independent-Peer-Review.pdf>

⁴⁸ See S Gould (2011); Brady, C. J. & Noske, R. A. (2010); Maron M. et. al. (2012)

⁴⁹ Gibbons and Lindemeyer (2007); van Teeffelen et. al (2014)

⁵⁰ NSW Scientific Committee Submission on the draft NSW Biodiversity Offsets Policy for Major Projects (www.environment.nsw.gov.au/resources/biodiversity/offsets/66NSWScientificCommittee.pdf)

⁵¹ Sydney Morning Herald, 16 March 2016, ‘Very poor’: Environment office opposed miners using rehabilitation work as biodiversity offset, www.smh.com.au/environment/very-poor-environment-office-opposed-miners-using-rehabilitation-work-as-biodiversity-offset-20160315-gnifb3.html#ixzz48vMmzJsp

⁵² Clause 12.14.1.10, *Draft Biodiversity Assessment Methodology*

7. The *Draft Biodiversity Assessment Method* allows proponents to pay money into an Offsets Fund prior to adequate offsets being identified

The NSW Government proposes establishing a new Biodiversity Conservation Trust that will be responsible for managing private land conservation agreements and the expanded NSW biodiversity offsets scheme, including a New Offsets Fund.

The *Draft Biodiversity Assessment Method* allows proponents to discharge offsets requirements simply by paying money into a fund rather than requiring offsets to be identified and secured before development proceeds.

Unlike other commodities (such as carbon pollution), biodiversity is difficult to quantify, which makes calculating offset credits inherently difficult (Walker S. et al. (2009)). Further, there is little information about how offsets will be monitored into the future to determine whether this system compensates for loss of biodiversity values or perpetuates ongoing biodiversity decline.

The idea that land clearing or development applications could be approved without certainty as to offset measures is a clear contradiction of the recommendation of the Senate Standing Committees on Environment and Communications that environmental offsets related to any particular development or activity should be clearly identified prior to approval being given for that development or activity⁵³.

8. The *Biodiversity Conservation Bill 2016* and *Local Land Services Amendment Bill 2016* allow for discounting of biodiversity credits

When the draft *NSW Biodiversity Offsets Policy for Major Projects* was first released for public comment, significant concern was raised over proposals to allow 'discounting' of biodiversity credits when a major project would have significant social and economic benefits to NSW.

The Office of Environment and Heritage *Submissions Report on the Draft NSW Biodiversity Offset Policy for Major Projects* noted that:

“Almost half of submissions commented upon the discounting provision within the policy, with the vast majority opposed.

Most opposition was focussed around the potential for discounting to lead to adverse environmental outcomes through a development not being fully offset. The NSW EDO stated that discounting ‘potentially allows environmental concerns to be overridden by socio-economic considerations’. The Australian Marine Sciences Association noted the importance of social and economic considerations, but argued that the ‘current discount clause threatens the efficacy of the entire policy’.

Some stakeholders expressed concern around the discretion involved in discounting, stating this could lead to political or personal considerations gaining precedence over environmental concerns. The Institute of Environmental Studies at University of NSW (UNSW) wrote that discounting will introduce ambiguity into the policy. The Nature Conservation Council stated ‘the proposal to allow discounting will create uncertainty for proponents, is likely to lead to inequitable outcomes and

⁵³ Senate Standing Committees on Environment and Communications – Inquiry into Environmental Offset, Recommendation 7 www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Environmental_Offsets

will encourage proponents to seek case-by-case exemptions, rather than applying a consistent and predictable methodology to determine whether a proposal will be permitted and the offset conditions to be required”.

In light of the significant concern raised, OEH recommended that discounting measures be removed from the policy:

“A significant number of submissions argued strongly that discounting is fundamentally at odds with offsetting. The intention of the draft policy was only to apply discounting in very limited circumstances. Given the overwhelming dissent and unease with discounting and the fact that it was only intended to be used extremely rarely, it is proposed that the principle be removed from the policy...”

Proposed amendment: Remove the discounting principle from the policy.”

Discounting provisions were not included in the final *NSW Biodiversity Offsets Policy for Major Projects*.

It is therefore concerning that the concept of discounting has been reintroduced in the new biodiversity conservation framework. While not explicitly included in the *Draft Biodiversity Assessment Methodology*, several proposed clauses of the Bills allow for the discounting of offset credits:

- Clause 60CC *Local Land Services Amendment Bill 2016*

...

(4) The Minister for Primary Industries **may reduce the biodiversity credits that would otherwise be required to be retired if the Minister determines that the reduction is justified having regard to the environmental, social and economic impacts of the proposed clearing and the agricultural purpose for which the land is to be used after it is cleared.** The Minister must give reasons for a decision to reduce the biodiversity credits.

- Clause 7.15 *Biodiversity Conservation Bill 2016*

(4) The consent authority **may reduce the biodiversity credits that would otherwise be required to be retired if the consent authority determines that the reduction is justified having regard to the environmental, social and economic impacts of the proposed development.** The consent authority must give reasons for a decision to reduce the biodiversity credits

Further, in the case of State Significant Development and Infrastructure, the Minister for Planning will have significant discretion to discount or ignore requirements for biodiversity offsets credits:

- Clause 7.15 *Biodiversity Conservation Bill 2016*

(3) If the Minister for Planning decides to grant consent or approval, the conditions of the consent or approval **may require the applicant to retire biodiversity credits to offset the residual impact on biodiversity values (whether of the number and class set out in the report or other number and class).** The residual impact is the impact after the measures that are required to be carried

out by the terms or conditions of the consent or approval to avoid or minimise the impact on biodiversity values of the proposed development.

9. Offset areas can be offset (and are therefore not actually protected in perpetuity)

The Biodiversity Conservation Bill contain provisions undermine a key premise of biodiversity offsetting - that allows offset areas to be subsequently cleared (subject to further offsetting) [e.g. clause 5.11 and 5.16 of the Biodiversity Conservation Bill 2016]. This is contrary to best practice offsetting practice that offsets be protected in perpetuity.

10. The Draft Biodiversity Assessment Method does not meet Federal standards

It is unlikely that the NSW policy as proposed will meet federal standards. For example, the NSW policy allows expanded use of indirect offsets and supplementary measures, while the Australian Government's Offsets Policy under the *Environmental Protection and Biodiversity Conservation Act* 1999 puts a 10% cap on the use of supplementary measures.

In addition to the key concerns outlined above, we make the following additional comments about specific aspects of the BAM and its application:

Serious and irreversible impacts

The 'serious and irreversible impacts' element of the BAM is the only mechanism that could act as a 'red flag' and provide protection for environmentally sensitive areas.

We have significant concerns with the way this component is intended to operate:

- The term 'serious **and** irreversible' is inconsistent with the precautionary principle, which uses the terminology 'serious or irreversible', and which has been applied by decision makers and the judiciary to date⁵⁴. We understand that this was a deliberate shift language, and we are concerned that it sets a higher threshold for establishing impact.
- The detail of what would constitute 'serious and irreversible' damage has not yet been developed. Given that this is a key element of the reform package, it is disappointing that the criteria for defining serious and irreversible impacts are missing. We strongly urge the Government to undertake further public consultation on this element of the reform package.
- We do not support the provisions of the Biodiversity Conservation Bill 2016 that provides discretion to the Minister in applying "serious and irreversible" impacts to State significant development and State significant infrastructure (clause 7.17(3)). This clause creates inequality, and undermines the ability of the reform package to provide real protection for biodiversity.

BAM Thresholds

Information regarding the BAM thresholds is limited and confusing. It is understood that another map will be developed, a 'threshold values map, to establish whether the BAM will apply. Again, there is little information about this important feature of the proposed new system.

⁵⁴ See for example comments by Preston CJ in *Telstra Corporation Limited v Hornsby Shire Council* [2006] NSWLEC 133

Accreditation system

We generally support the proposal to have an accredited person apply the Biodiversity Assessment Method. However we think this is a missed opportunity to generally improve the entire environmental impact assessment process, not just the elements relating to biodiversity assessment. To this end, we note the Government's previous proposal that 'consultants that provide Environmental Impact Statements should be chosen from an accredited panel, and required to meet certain standards regarding the impartiality and quality of their work.'⁵⁵ Further, we believe the most effective way of ensuring the integrity of environmental assessment is to break the financial nexus between the proponent and the environmental consultant. So long as developers continue to directly pay the consultants there is the risk of bias, undue influence and unethical practices

4.8 BIODIVERSITY CERTIFICATION

Biodiversity certification will be carried over into the new system, and it is intended that these provisions will be more readily utilised.

We have a number of concerns with the proposed provisions regarding biodiversity certification:

- Firstly, the requirement that the Minister may confer biodiversity certification only if biodiversity certification improves or maintains biodiversity values has been removed⁵⁶. We do not believe this is consistent with the recommendations of the Independent Biodiversity Review Panel, who recommended that the 'improve or maintain' test be removed at the site scale only⁵⁷.
- Secondly, weaker offsetting rules will apply under the proposed Biodiversity Assessment (see our overarching comments in response to the draft Biodiversity Assessment Method above).
- Biodiversity certification proposals will be able to apply additional 'supplementary measures' to satisfy offsetting requirements. As outlined above, we do not support the use of supplementary measures as it does not meet the principles of 'like for like' offsetting.
- Details in relation to the proposed new 'strategic biodiversity certification' is missing and it is unclear how this will operate in practice.

4.9 REGULATING WILDLIFE INTERACTIONS

The proposal to remove approximately 20,000 licences in favour of a risk based approach to pet ownership of native animals is in direct contrast to the NSW Government's recent decision to strengthen regulations for companion animals by enhancing the ability to track and trace animals for the duration of their lives.

The animal welfare issues associated with non-native companion animals such as dogs and cats is well documented and relaxing licensing requirements for native animals removes all record keeping and any ability to undertake compliance checks. In the absence of a strong regulatory framework, animal welfare issues and risks to wild populations of animals is increased. There is no provision for the registering of native animals outside of the current licensing system.

⁵⁵ This proposal was put forward as part of the NSW Planning System Review Green Paper (p 58) but has not been implemented. The Biodiversity Legislation Review provides an opportunity for Government to continue to pursue this proposal.

⁵⁶ See section 126O, Threatened Species Conservation Act 1995

⁵⁷ Independent Biodiversity Legislation Review Panel *A review of biodiversity legislation in NSW – Final Report*, December 2014, p

Native animals have specific dietary, housing and supplementary needs, which can be more complex and costly factors in contributing to their care. This may increase the abandonment and surrender of native animals or release of unwanted pets into local wild populations.

The development of codes of practice to better inform captive management and husbandry of native species may have considerable value in guiding the proper care and management of native fauna held in captivity. Nevertheless, they should be used as an adjunct to licencing; not an alternative.

The removal of licenses undermines the ability to prevent poaching of native animals from wild populations. The lack of regulation increases opportunities for illegal trapping and trading of wildlife.

The *National Parks and Wildlife Act 1974* includes significant penalties for the unauthorised collection of native plants and animals from the wild. It also includes a licensing regime for keeping and trading captive bred native animals; movement of native animals across state borders; and research into native plants and animals. These provisions are essential and should be retained.

In the absence of detailed data on the illegal collection of plants and animals from the wild it is difficult to determine the precise extent to which illegal collection is a threat to biodiversity. The development of a 'risk-based' approach is thus highly questionable given uncertainty regarding the degree of risk involved.

Despite this uncertainty, illegal collection is a serious threat, particularly where it acts in concert with other threats to increase extinction risk. For example the Broad-headed Snake (*Hoplocephalus bungaroides*) is threatened by illegal collection but also by removal of bushrock and hollow bearing trees from sandstone escarpment areas. For species not presently at risk of extinction, illegal collection is unlikely on its own to constitute an extinction risk. It may; however, have significant negative impacts on biodiversity at a local scale, including flow on affects due to loss of interactions between species.

Better managing the care of native animals in captivity and preventing illegal collection of animals from the wild is essentially a question of providing sufficient resources for monitoring and enforcement activities. In particular, better monitoring of habitat areas for species known to be collected illegally or areas where illegal collection is known or suspected to occur.

4.10 EDUCATION

While increasing public education on the importance of native plants and animals is valuable it cannot compensate for the loss of biodiversity that will occur if the draft biodiversity laws are adopted. Public education should be seen as an adjunct to strong biodiversity legislation, not an alternative.

Public education should include assessment and publication of the value of ecosystem services provided by healthy biodiversity in NSW. 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. While the precise value of ecosystem services protected by NSW biodiversity legislation is difficult to quantify it is undoubtedly substantial.

Collecting data on the value of economic value of biodiversity would improve the quality of debate and decision making on planning and natural resource management. We suggest that the NSW Natural Resources Commission be responsible for coordinating the collection and publication of this data.

There is a diverse array of biodiversity collected and published by government and non-government organisations in NSW. Resources such as vegetation mapping, BioNet, Atlas of Living Australia, PlantNet, threatened species profiles, Birdlife Australia etc provide vital, high data on NSW biodiversity.

Given the vital role of biodiversity data in determining conservation priorities and assessing the impacts of proposed developments, collating this data into a single source would offer considerable benefits. Creating a single 'one-stop shop' website detailing all available sources of biodiversity data and providing links to them would improve access to biodiversity data.

The need to restrict access to some sensitive data is acknowledged. For example, occurrence data for threatened species which are targeted for illegal collection such as the Broad-headed Snake (*Hoplocephalus bungaroides*). However there is scope for providing improved access to detailed information needed for small-scale environmental assessments.

4.11 REGULATING WILDLIFE REHABILITATION PROVIDERS

The explanatory notes accompanying the legislation refer to new "licensing arrangements for new groups and procedures for dispute resolution". However these issues are not addressed in the draft legislation.

The sector could certainly be strengthened by improved systems for dispute resolution and additional support to increase volunteer engagement to meet the growing demand for wildlife rescue and care. However fragmentation of the wildlife rehabilitation sector, though either new groups within existing jurisdictions, fragmentation of the jurisdiction of existing groups, or by allowing non-resident members to care for wildlife elsewhere, threaten the viability of the whole sector. The wildlife rehabilitation sector is directly accountable to the general public, donors and supporters, and there is an expectation that it will consistently respond to calls for assistance in a reliable, appropriate and timely way.

The wildlife rehabilitation sector is almost entirely voluntary and provides a very significant free public service, both in wildlife care and advice to the community. If groups are fragmented, it is unclear how the interaction with the public will be managed. Related issues are the ability of diminished existing groups to raise funds, maintain services and standards of training.

The care and rehabilitation of native wildlife requires specialised knowledge and training. For this reason wildlife carers should belong to recognised wildlife care organisations that are able to provide proper training and support to volunteers. The important work of these organisations should be acknowledged and increased material support provided by the NSW Government.

It should be acknowledged that the single greatest threat to native wildlife is land clearing and habitat destruction. The acceleration of land clearing that will occur as a result of the NSW Government's proposed biodiversity law changes will result in increased death, injury and displacement of native wildlife. This will place increased strain on wildlife carers and rescue organisations.

4.12 THREATENED SPECIES LISTINGS

The Review Panel recommended aligning NSW listing categories and assessment criteria for threatened species and ecological communities with those of the International Union for Conservation of Nature (IUCN). Although the IUCN criteria haven't been directly referenced, they have in effect through referral

to the EPBC Act in Part 4.7b of the Draft Biodiversity Conservation Bill 2016, and these alignments are largely facilitated through the Common Assessment Methodology Memorandum of Understanding recently signed by the Commonwealth and New South Wales Minister for the Environment. This process also covers Review Panel recommendation 34 to harmonise State and Commonwealth lists of threatened matters.

While there may be value in harmonisation of State and Commonwealth listings it is imperative that the perverse outcome of reducing biodiversity in NSW by viewing NSW populations of threatened species as 'expendable' is not produced, and the proposal of a single national threatened species list must contain appropriate interim listing safeguards.

We are particularly concerned that the use of the Commonwealth listings under the *Environmental Protection and Biodiversity Act 1999* will result in species that are threatened in NSW (but not nationally listed) losing protection within NSW. We are also concerned that the proposal that populations not be eligible for listing if they belong to a species that is separately listed will diminish protection for threatened populations—this appears clearly designed to remove a hurdle for development.

There are compelling reasons to recognise the importance of protecting species that are threatened in NSW but not listed nationally. There are equally compelling reasons for recognising individually threatened populations, even within a species that has an overall threat status. Failure to do so ignores the vital roles that species/populations may play in the functioning of ecosystems at local and regional scales. Extinction of these populations may have cascading effects on ecosystem function and biodiversity. Furthermore, threatened populations may represent biologically distinct taxa such as unique species, sub-species and races that have not yet been described due to limitations of knowledge. If threatened populations are viewed as expendable because of a species' overall secure status the result could be extinction of unique taxa before they have been formally described. As knowledge increases and molecular techniques are applied to taxonomy, the number of previously 'cryptic' taxa being described continues to climb.

We do not believe that having national and state threatened species lists causes undue confusion or duplication. Furthermore there is considerable value in considering threat status at both national and state level. As noted above in relation to threatened populations a threatened NSW population of a species which is secure at the national level may actually represent a biologically distinct taxon. Removing state listing for this species on the basis that it is secure nationally may in fact expose a unique taxon to increased extinction risk.

The recognition that individual populations may constitute biologically distinct taxa is consistent with the concept of Evolutionary Significant Units (ESUs) under the United States Endangered Species Act of 1973. Under the Act a sub-species, race or population may be listed as an endangered ESU even if the species is otherwise secure overall.

The exploration of such alignment changes presents a prime opportunity to bring the treatment of threatened species listings in NSW more in line with both the IUCN and EPBC Act by including threatened marine and aquatic species under the schedules of any new legislation. Although the *Fisheries Management Act 1994* was not included in the review process, it is a technicality that shouldn't hinder meaningful conservation action by considering having all threatened species, regardless of their being terrestrial, marine, or freshwater, under the responsibility of the new legislation and a non-industry Minister.

Adopting a “more strategic” approach to listing threatened species and ecological communities has been encouraged in the Draft Bill through the ability for the NSW Scientific Committee (NSW SC) to nominate internally and set nomination themes in addition to the current invitation of public nominations (Part 4.10). While a positive move, the process is likely to still be heavily reliant on public submissions and it is important that those falling outside the set theme are given proper and timely consideration.

Part 4.12 outlines an equivalent to the EPCB Act’s Finalised Priority Assessment List (FPAL) through a publically available prioritisation list determined by the TSSC. However this list lacks setting realistic and amendable assessment deadlines as with the FPAL, and should be required to do so. Similarly, a statutory timeframe for the NSW SC to complete an assessment of no more than five years must be set to ensure nominated matters don’t have the potential to be delayed for political or other reasons.

Part 4.36(2) of the Draft Biodiversity Conservation Bill states that Key Threatening Processes (KTP) may, but are not required to be, included in the proposed Biodiversity Conservation Program. As KTPs identify threats to listed matters that may be identified following a species or ecological community’s listing, or that might be relevant to more than one listed matter, their inclusion in any Biodiversity Conservation Program should be strongly encouraged.

The Review Panel also recommended the NSW Scientific Committee be required to undertake periodic five-year reviews of lists that should be subject to independent scientific peer review, and this is addressed in Part 4.18 of the Draft Bill. While this is a sound requirement, considering the large number and complexity of assessing listed matters it is likely to be extremely taxing on the NSW SC. It is imperative that adequate resources are provided and a realistic level of scrutiny expected as to not impact on the assessment of potential new threatened matters is not in any way hampered. The reviews should include an assessment of whether listed species, populations and ecological communities have shown signs of further decline or recovery, as well as identify any additional conservation measures that are required.

4.13 AREAS OF OUTSTANDING BIODIVERSITY VALUE

Areas of Outstanding Biodiversity Value have the potential to be a key mechanism for providing important protection for biodiversity in NSW. However we are concerned that these provisions may be underused, just like the current Critical Habitat provisions of the *Threatened Species Conservation Act 1995*. We note that to date only four sites have been listed as critical habitat under the *Threatened Species Conservation Act 1995*, and they are all on public land. If the intent of the proposed reform package is to encourage private land conservation as a means of enhancing and conserving biodiversity, then the Government must provide the appropriate support and incentives for ensuring that the provisions for Areas of Outstanding Biodiversity Value are effectively used on private land.

Furthermore, we strongly believe that declaration of Areas of Outstanding Biodiversity Value should not be limited to biodiversity ‘hot spots’. Critical habitat for individual threatened species or groups of threatened species should also be eligible for listing. In this way the Areas of Outstanding Biodiversity Value could incorporate and expand upon current critical habitat declarations. For example, sites managed for the conservation of ‘site managed species’ under the Saving Our Species program should be considered as Areas of Outstanding Biodiversity Value due to their critical importance in maintaining biodiversity in NSW. Areas of Outstanding Biodiversity Value should be afforded the highest possible level of protection. In particular, they should trigger a ‘red lights’ and not be subject to offsetting.

4.14 THE NEW PRIVATE LAND CONSERVATION FRAMEWORK

The Independent Biodiversity Legislation Review Panel recommended that mechanisms for biodiversity conservation on private land be consolidated into a three tiered system (biodiversity offsetting agreements, voluntary conservation agreements and wildlife refuges) that provides proportionate incentives to landholders, and noted that:

- *There is a need to better recognise the contributions some landholders already make voluntarily to conservation action on private land; and*
- *Biodiversity Offsetting Agreements would operate to secure all offsets required for site-by-site and landscape scale development*

Following review of the Draft Biodiversity Conservation Bill 2016 and further discussions with and briefing by Government, we believe the Private Land Conservation package is too heavily weighted towards tier one agreements and that the majority of the funding should instead be designated for the support of existing and establishment of new Conservation Agreements. Although the name has since been changed from Biodiversity Offsetting Agreements to Biodiversity Stewardship Agreements (BSA), it appears that their operation hasn't, with credit generation able to offset development unless the agreement was entered into using additional Government investment funding and credits generated retired through the use of further additional funding. This agreement type may be appropriate in some cases to enhance connectivity, but due to their additional market-driven funding should be prioritised below the creation of new and support of existing Conservation Agreements.

We have received feedback from landholders that they are not comfortable with the knowledge that protection of one area of land may come at the cost of another lost to development (as is the case where land is generating biodiversity credits which can be retired). We believe that the government has underestimated the number of people who are prepared to protect nature without a large financial gain, and therefore we reiterate that the focus should be on supporting existing Conservation Agreements and establishing new ones, not generating credits.

As properties with Conservation Agreements in place are already of high conservation value and likely providing connectivity, their conversion to BSAs achieves very little environment gain in this regard, meaning the only real benefit is to facilitate development through the generation of credits. Although it appears to be being argued that there is landholder benefit through income stream generation, this would be better served and achieve greater biodiversity gain if funds were provided directly to Conservation Agreement holders for their considerable land management requirements.

While we generally disagree with the ability for landholders to convert from in-perpetuity Conservation Agreements to BSAs, believing instead that Government investment should focus on funding the former while the offset market will largely take care of the latter, there are situations when it is clearly unacceptable. These include when a court order has been made enforcing a Conservation Agreement as mediation for illegal clearing (allowing it's conversion and financial gain to arise from management being against the court's intent), and when a landowner has entered into an in-perpetuity Conservation Agreement and since sold the property – they may have been at a financial disadvantage for doing so and their intent for the property's future management needs to be respected. Again, this being seen as restricting a current Conservation Agreement landowner is easily negated by adequate financial incentives being provided to this tier of conservation mechanism.

We also disagree with the weakening of standards for the creation of Conservation Agreements, as existing high biodiversity thresholds should be maintained to ensure the most valuable land is prioritised for the creation of new agreements – both within and outside of the Priority Investment Areas.

We do not support provisions that continue to allow Conservation Agreements to be trumped by mining and petroleum projects. For example, the Minister may terminate a Biodiversity Stewardship Agreement without the landholder's consent in order to facilitate mining and petroleum activities on the site⁵⁸. This arguably undermines the integrity and utility of the private conservation system and is inconsistent with the principles of ESD.

The draft Biodiversity Conservation Bill 2016 does not provide any clarity regarding the status of conservation agreements entered into under the existing system. This has been a key area of concern for a number of our members and supporters who hold existing conservation agreements, and who are unsure of how these will be managed under the new regime. There are significant concerns that protections that have been established in good faith will be undermined by the new regime. We do not support the application of the new provisions to existing biodiversity offset arrangements or conservation agreements, and the common law presumption in favour of non-retrospectivity must be upheld in this instance.

Finally, although of no serious consequence, blatant misinformation in Government fact sheets such as "This is the first time landholders in NSW can receive funding to manage their land for conservation purposes" is clearly spin⁵⁹ and does not fill us with confidence regarding the unseen detail of the private land conservation package.

4.15 BIODIVERSITY CONSERVATION INVESTMENT STRATEGY

While state-wide prioritisation is likely to be beneficial for Biodiversity Stewardship Agreements where identification of specific offsets is required, it must not impact on or delay the ability of altruistic landowners to enter into private land conservation mechanisms such as Conservation Agreements. Such an approach would leave those who have made and will make conservation commitments based on goodwill behind due to their potential location outside of the priority area, risking the effectiveness of programs which rely on landholders' appetites to participate. With limited funds however, prioritisation makes sense as long as appropriately done, and we support the proposal provided prioritisation is used as a driver where there are deficiencies rather than a restrictor when demand is high.

Although the majority of effort should be in establishing agreements within the investment area and providing establishment funding, a significant amount must be set aside for agreement establishment in other areas of the state as to not discourage the goodwill of landholders. Established Conservation Agreements outside priority areas must also still be able to receive stewardship funding, and a portion should also be set aside to provide stewardship and management funding for Conservation Agreements throughout the state.

⁵⁸ Draft Biodiversity Conservation Bill 2016, ss. 5.18, 5.19, 5.23

⁵⁹ We understand that when the *Native Vegetation Act 2003* and *Catchment Management Authorities Act 2003* were introduced funding was provided to CMAs to assist farmers to repair the landscape, see Wentworth Group of Concerned Scientists, Submission to Biodiversity Legislation Review Panel, September 2014, <http://wentworthgroup.org/wp-content/uploads/2014/10/Submission-to-Native-Vegetation-Review-Final-September-2014.pdf>

A wide variety of factors need to be taken into account when developing a Biodiversity Investment Strategy, many of which are already being used to prioritise assessment of Conservation Agreements. Such considerations include:

- Potential for restoration of habitat connectivity;
- Recovery and protection of listed threatened ecological communities;
- Recovery and protection of listed threatened species habitat;
- Securing land of the highest biodiversity importance in-perpetuity;
- Pre-emptively safeguarding properties in areas where future development is likely;
- Migratory needs of species, particularly those listed on international conventions;
- Current and future land use in the region;
- Soil quality and erosion potential; and
- Importance to water catchments;

4.16 BIODIVERSITY CONSERVATION TRUST

We remain unconvinced that the proposed Biodiversity Conservation Trust will be able to look after private land conservation in NSW more effectively than a better funded Government Department, and request that a cost-benefit analysis be undertaken to determine the most efficient and effective private land conservation program options, and the outcomes of this analysis be made publically available.

From the limited information publically available, it appears the Biodiversity Conservation Trust (BCT) will have an enormous task on hand managing both an extensive private land conservation program and the biodiversity offset market for the state. Such a Trust is likely to require significant funding to establish, and an administration budget of several million dollars per year to carry out its functions. If this funding is to come out of the \$240 million announced by Government for the NSW private land conservation program over the next five years, it will be a serious burden to the achievable outcomes were this funding instead to be provided to on-ground conservation management. As much of the Trust's function is acting on behalf of developers to find offsets, this administration and establishment budget should be entirely separate to the announced funding for private land conservation.

The highest priority step in supporting landholder participation in private land conservation is for the Trust to make meaningful contact with, listen to, and act on the concerns and needs of the many landholders already committed to conservation on private land through various mechanisms who have been neglected and disrespected by the NSW Government throughout the Biodiversity Legislation Reform process. As stated above, the members of the Stand Up For Nature Alliance have repeatedly expressed both publically and in stakeholder meetings the importance of consulting with those already engaged in private land conservation, and particularly those who have done so in-perpetuity through a Conservation Agreement signed with the NSW Minister for the Environment.

We know that this consultation did not occur, and as a result the views of those with the most invested and at stake of the proposed changes have been unacceptably ignored. Therefore the job of explaining the transition of various agreements to the new equivalents managed by the Biodiversity Conservation Trust falls directly on the Trust, and to maintain the goodwill and give proper respect to those who have not had a voice in the process they are in the unfortunate position of having their first order of business be damage control.

As several years of neglect from successive NSW Governments have resulted in poor engagement and restricted success of the current OEH private land conservation program, such as through property visits

generally not occurring and certainly not on the scale they have in the past, another priority for the Trust will be to ensure each and every property involved in a Government private land conservation mechanism is visited and inspected – both to assess potential for elevation and to ensure the conditions of the current agreement types are being adequately met.

To continue best supporting landholders to participate in private land conservation it is essential that the Trust expends the majority of effort on providing for owners of land of high conservation value through the financial support and encouragement to enter into Conservation Agreements. Owners of such land, who may already be involved in private land conservation through existing entry level mechanisms such as Wildlife Refuge or Wildlife Land Trust agreements, are more likely to have an interest in enhancing their commitment and understand the importance of their conservation actions. It is also imperative that interested landholders with high conservation value properties are not turned away due to falling outside Priority Investment Areas. Although advertising and engagement effort should logically be focused on these areas, the entire private land conservation network relies on the appetite of private individuals and how they are treated will set the tone for the program's future.

Incentives for entering into all agreement tiers need to be enticing enough to facilitate ongoing growth, as focusing only on the tier one Biodiversity Stewardship Agreements will quickly result in the decline of Conservation Agreements and Wildlife Refuges to the detriment of all three tiers. Wildlife Refuges are at risk of being viewed by the Trust as relatively unimportant and stagnating as a result, and neglecting this entry-level tier would threaten progression from agreements to the in-perpetuity levels.

4.17 CARBON AND CLIMATE CHANGE

The proposed legislation completely fails to take into account climate change, either as a threatening process in its own right or in the context of how the reforms will impact on Australia's greenhouse gas emissions and climate change. We would like to strongly assert how irresponsible we find this omission, and point out that failing to address climate change will most negatively affect the section of the community that these reforms are supposed to benefit: farmers. In light of regional and global trends that have already (and will in future) resulted in increased temperatures and climate extremes in Australia (CSIRO 2015), a relaxing of land clearing controls is not an appropriate policy response to the challenges facing landholders.

The impact of historical land clearing on regional climate

Research (Pitman et al. 2004, McAlpine et al. 2007, Deo et al. 2009) shows that land clearing and loss of vegetation cover has already had strong regional climatic effects in Australia. These effects include:

- Increased surface temperature in eastern Australia and south-western Western Australia, particularly in summer;
- Warming and reduced rainfall in south-western Western Australia;
- Decreased summer rainfall in eastern Australia (4-12%) and south-western Western Australia (4-8%);
- An average 2 degree increase in temperature during the 2002/2003 drought in eastern Australia;
- Decreased rainfall intensity in the Murray-Darling basin;
- Decreased wet-day rainfall of 10-30mm per year in southern NSW and northern Victoria;
- Increased number of dry days in coastal NSW;
- Increased duration of droughts in central NSW and northern Victoria (0.25-0.5 months per year);
- Amplification of El Niño events.

This research suggests that an increase in clearing as a result of the NSW reforms will hinder, not help, farmers as it will exacerbate future droughts, reduce rainfall and increase surface temperatures. In contrast, large-scale reforestation could help reverse the negative effects historic clearing has had on climate (Pitman et al. 2004, McAlpine et al. 2009).

Likely impact of the NSW reforms on emissions and climate change

The most recent figures (2013-14) (Commonwealth of Australia 2015) show that Land Use Land Use Change and Forestry (LULUCF) contributes approximately 3% to Australia's total emissions. However, emissions from LULUCF are now rising quickly from an historic low in 2010-2011 and will rise by 212% over the next five years—the largest increase in any emissions sector. Emissions from deforestation in Australia will average 46 million tonnes per annum between 2014 and 2020, which is almost 24% higher than 2013 levels (Bulinski et al. 2016). This increase is attributed to regulatory changes resulting in increasing land clearance. These figures do not include any increase in emissions from LULUCF in NSW as a result of the removal of the *Native Vegetation Act 2003* (NVA). A change in NSW legislation that results in an increase in land clearing would therefore be expected to further increase emissions from LULUCF.

This draft legislation is almost certain to result in an increase in land clearing. This is because it repeals the *Native Vegetation Act 2003* which is known to have dramatically reduced land-clearing (Taylor and Dickman 2014), identifies unregulated land and increases the range of scenarios in which landholders can undertake self-assessable code-based clearing.

Codes are likely to result in an increase in clearing for several reasons: they remove the simple deterrent of having to go through a process for clearing, such as producing a property vegetation plan; they reduce interactions with ecologists in the Local Land Services or Office of Environment and Heritage who can help ensure clearing is minimised; and they expand the range of instances under which landholders can clear—including broad-scale land clearing under the 'equity code' and threatened ecological communities and they remove legislative requirements currently in place.

Sweeping changes in regulation of native vegetation management occurred in Queensland under the Newman government in 2012. The categorisation of land into regulated and unregulated, the relaxing of clearing laws by reducing enforcement and the introduction of code-based and exempt clearing resulted in a huge increase in vegetation clearance with between 275-296,000ha cleared in 2013-14 (Maron et al. 2015, Taylor 2015, Bulinski et al. 2016). The NSW codes closely resemble those in Queensland (see section on codes).

The NSW reforms are occurring against the backdrop of increasing urgency to address the threat of climate change. This urgency led to the development of the Paris Agreement in December 2015, signed by 196 countries. The relaxation of rules regulating land clearing in NSW therefore undermines global efforts to tackle climate change and will further erode Australia's international standing.

Projections show that, not counting abatement from Direct Action, Australian emissions in 2020 would be 17% above 2000 levels (Commonwealth of Australia 2015). Counting emissions reductions purchased by Direct Action, Australia is set to miss its 2020 goals of a 5% reduction on 2000 levels by almost 20% at a conservative estimate (Christoff 2015).

Given the major impacts (lower rainfall, more heatwaves, longer fire seasons) that climate change will have on Australia (CSIRO 2015) this is a source of extreme concern and shows that there is a huge amount

of work to be done to reduce carbon pollution and meet international goals. As the most populous state in the country NSW bears a particular responsibility for Australia's emissions reductions.

Emissions from agriculture

Agriculture contributes 15% of Australia's emissions (Commonwealth of Australia 2015). However, agricultural emissions do not include CO₂ besides that emitted from liming and the application of urea. This is because emissions from animals are considered part of the carbon cycle. Agricultural emissions are projected to increase by 4% over the next five years, but again these figures do not take into account the proposed changes in NSW.

Broad-scale clearing resulting in the conversion of bushland to agricultural land under the new legislation will have a dual impact on emissions: there is an initial pulse of carbon released as vegetation is cleared and an ongoing source of carbon emissions created as agricultural activities take place.

Implications for emissions and farmers

Relaxing land clearing legislation ignores the importance of considering land cover change effects on regional climate, and is diametrically opposed to recommendations to increase cover by tightening legislative controls on clearing and investing in restoration to avoid irreversible climate change (McAlpine et al. 2009). Australia is already struggling to achieve its legally binding, and internationally low, target of a 5% reduction in carbon emissions by 2020. Given the threat of climate change and the implications to rural communities in particular, it is vital that every effort is made to reduce emissions quickly. Relaxing land clearing laws in NSW will instead result in a further increase in emissions on top of those resulting from Queensland's legislative changes.

Not only does this undermine Australia's efforts to reduce emissions as part of international commitments made at the Paris conference, it also undermines the \$1.2 billion investment (Clean Energy Regulator 2016) of Australian taxpayers to avoid land clearing. In fact, the changed emissions trajectory that followed increased clearing in Queensland (which does not include any emissions increase from NSW) will add 115 million tonnes of CO₂ by 2030 (Bulinski et al. 2016). At the average ERF price of \$12.25 per tonne, these emissions would cost \$1.4 billion—more than the \$1.2 billion worth of vegetation-based abatement purchased by the ERF to April 2016.

Given the fact that NSW farmers have benefited most from the ERF, reversing the emissions reductions paid for by Australian taxpayers is contradictory policy. In addition, the increase in land cleared may also compromise the future ability of farmers to profit from native vegetation, as there will be less vegetation available to protect in return for payments.

4.18 MONITORING AND REPORTING

Although one of the proposed objects of the Draft Biodiversity Conservation Bill 2016 is 'collating and sharing data, and monitoring and reporting on the status of biodiversity and ecosystem services and the effectiveness of conservation action, the Bill lacks the specific provisions to ensure this achieved. Reporting of all monitoring data is essential for transparency, and to allow the framework to be adequately evaluated.

In particular, we note that:

- There are no outcomes based objectives, targets or performance indicators for measuring the outcomes of the new regime.
- Monitoring and reporting on conservation agreements is not mandatory⁶⁰.
- There is no mandatory requirement that monitoring be included in a biodiversity certification agreement⁶¹.
- While certain public registers will carry over under the new system, the relevant provisions in the draft Biodiversity Conservation Bill 2016 are lacking in detail⁶².
- Several of the native vegetation public registers provided for in the Local Land Service Amendment Bill 2016 are only required to include 'aggregate information'.⁶³
- Certain registers that are provided for under the current legislative framework are omitted from the draft Biodiversity Conservation Bill 2016. For example, there is no explicit requirement to create a register of area of outstanding biodiversity values (c.f. critical habitat)⁶⁴ or an interim protection order register⁶⁵.
- The Government should require the performance of the new framework to be independently audited.

We are also concerned that the new framework does not require the LLS to monitor native vegetation clearance undertaken pursuant to the proposed codes and to maintain a public register of this information. This is concerning given the significant increase in land clearing that is expected under the new land management regime.

4.19 COMPLIANCE AND ENFORCEMENT

Compliance and enforcement is an important element of any legal regime – laws are only effective if they are adequately enforced. There are already existing concerns within the community that, due to inadequate capacity and resourcing, illegal clearing activities under existing laws go under the radar.

There is also uncertainty within the community as to what will happen to past illegal clearing once new laws come in, and there have been suggestions that amnesties for past illegal clearing could apply. In order to appease community concern, the Government should clearly state its intention on this issue.

While we are pleased to see criminal offence and civil remedies carried over into the draft Bills, the fact that Government has not yet finalised the compliance arrangements for the new laws, including which Government agencies will be responsible for compliance and enforcement under the new regime, does little to create community confidence in the Government's ability and will to police land clearing activities.

Our specific comment our outlined in more detail below.

⁶⁰ For example, clause 5.6(h) of the draft Biodiversity Conservation Bill 2016 provides that biodiversity stewardship agreements may provide for monitoring, reporting and audit requirements. There are no equivalent provisions for conservation agreements, or wildlife refuges, which are silent on the issue of monitoring and reporting.

⁶¹ Clause 8.16(2)(h), draft Biodiversity Conservation Bill 2016.

⁶² See, for example, Part 9, draft Biodiversity Conservation Bill 2016.

⁶³ Clause 60VV(1), draft Local Land Services Amendment Bill 2016

⁶⁴ Compare to section 55 of the *Threatened Species Conservation Act 1995* (NSW)

⁶⁵ Compare to section 91I, *National Parks and Wildlife Act 1974* (NSW)

Criminal offences

We note that many of the criminal offence from existing legislation are carried over into the new system, and there is an increase in penalties for certain offences. However we have significant concerns that the provisions relating to the harming of animals and damaging habitat or threatened species or ecological communities requires the offender to have knowledge that the act would be likely to harm the animal or that habitat is a threatened species or ecological community. This is a shift from current provisions, which are generally strict liability offences. That is, while there are currently certain exemptions, such as clearing in accordance with a property vegetation plan under the Native Vegetation Act 2003, lack of knowledge is currently not a defence.

We recognise that this shift has been introduced at the same time as self-assessable land clearing codes are being expanded. So, not only is oversight of land clearing activities being reduced by now allowing landholders to apply self-assessable codes, land holders will not be liable if they inadvertently harm animals or damage habitat or threatened species or ecological communities. This sends the message to landholders that they don't have to be responsible for actions they take in reliance on self-assessable codes. Once again, this shift is aimed at facilitating land clearing, rather than achieving biodiversity outcomes, and is not supported.

Civil offences

We generally support the provisions that create open standing for any person to bring proceedings against a breach of the proposed Biodiversity Conservation Act or land management sections of the Local Land Services Act⁶⁶. However we are concerned that many of the provisions of the draft legislation contain discretionary elements and would therefore be difficult to enforce. These include sections where the decision maker has to form an opinion, or provisions that require that certain matters 'should' rather than 'must' be taken into consideration.

We are also concerned that the statutory limitation period has been reduced from 3 months to 30 days. This is inconsistent with the general statutory judicial review period set out in the NSW Civil Procedure Rules (which applies to appeals brought under the EPA Act)⁶⁷.

While we support clause 13.14(1) of the Draft Biodiversity Conservation Bill which creates open standing for any person to bring proceedings against the breach of a biodiversity stewardship agreement, it is unclear why Ministerial consent, is needed to exercise the same standing in relation to other private land conservation agreements 13.14(2), and we would argue that the general standing should apply to all categories.

Finally, we are concerned that a number of the provisions in the draft Bills appear to be 'privative clauses' aimed at preventing the invalidation of a decision made under certain provisions of the Bill⁶⁸. It is unclear how these provisions are intended to operate in light of legal precedence that private clauses cannot remove the jurisdiction of the Court to determine and enforce the jurisdictional limits of executive power⁶⁹.

⁶⁶ Clause 13.13 Draft Biodiversity Conservation Bill 2016 and clause 60RR Local Land Services Amendment Bill 2016

⁶⁷ Clause 59.10(1) *Uniform Civil Procedure Rules 2005* (NSW)

⁶⁸ See for example clauses 3.3(3), 8.26(1) and 9.5 of the Draft Biodiversity Conservation Bill 2016

⁶⁹ See *Kirk v Industrial Court of NSW* [2010] HCA 1; *Haughton v Minister for Planning and Macquarie Generation*; *Haughton v Minister for Planning and TRUenergy Pty Ltd* [2011] NSWLEC 217.

4.20 FUNDING AND RESOURCES

If implemented, the reform package will create substantial change to the way land clearing applications and biodiversity assessment is undertaken in the future. It will see an increased role for the Local Land Service and Minister for Primary Industries in dealing with land clearing applications. There will also be new requirements for consent authorities in considering impacts on biodiversity.

Substantial funding is needed to support the reform package. In particular, the Independent Biodiversity Review Panel argued that increased investment in private land conservation was needed to overcome the risk of biodiversity loss from weakening local biodiversity protections⁷⁰. Additionally the Panel recommended that there be adequate funding and capacity building to ensure Local Land Services and councils have the appropriate skills and adequate resources to implement the proposed model⁷¹.

The 2016/17 NSW Budget was delivered on 21 June 2016, however, other than small proportions of pre-existing commitments to increase funding for the Saving Our Species program and private land conservation, it is unclear what additional investment has been made to deliver the reform package.

In order to deliver the proposed reform package, further funding must be made available to:

- develop the outstanding key components of the reform package, including the mapping, State Environmental Planning Policy and regulations;
- train government staff across all relevant agencies on the new laws;
- enable the Local Land Service and Department of Primary Industries to implement the laws, including for assessment, monitoring, compliance and enforcement;
- enable the Office of Environment and Heritage and any other relevant agency for monitoring, compliance and enforcement;
- establish and run the new Biodiversity Conservation Trust;
- establish the new framework around wildlife licencing, including education, monitoring and enforcement.

⁷⁰ Independent Biodiversity Legislation Review Panel *A review of biodiversity legislation in NSW – Final Report*, December 2014, p 7

⁷¹ Independent Biodiversity Legislation Review Panel *A review of biodiversity legislation in NSW – Final Report*, December 2014, Recommendation 9

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APPENDIX 1

The segmentation saga: vegetation mapping and its potential application to the NSW *Biodiversity Conservation Bill* and *Local Land Services Amendment Bill*

Introduction

Mapping is a fraught issue within the Office of Environment and Heritage (OEH) and has been for some time. Substantial differences of opinion as to what constitutes the best form of mapping exist internally. In January 2016, the Sydney Morning Herald published two stories^{72,73} on native vegetation mapping in OEH that painted a picture of internal disarray and cover-ups—including an apparent failure to produce a report (the Biofocus Report) critical of the vegetation mapping approach when sought under Freedom of Information in 2012.

The stories also highlighted the cost of the segmentation mapping project—estimated at over \$10 million—and work by Dr John Hunter that sought to validate the results of the segmentation mapping in the Upper Hunter (see below).

Concerns over the accuracy of segmentation mapping had previously led environment groups to seek a meeting with the OEH mapping unit in December 2015. At this meeting it was demonstrated that, for the Namoi region, the mapping was on average 60% accurate for Plant Community Types (PCTs) where sufficient plot data existed to inform the model. It was demonstrated that very few PCTs across the state had more than 20 data points to inform the model, and that there was weak correlation between the number of data points and the accuracy of identification. In addition, there appeared to be an upper limit (asymptote) where accuracy of identification did not increase markedly despite the addition of new data. This suggests that highly accurate modelling of vegetation communities is not possible due to the inherent complexities of modelling a suite of species. Accuracy was said to be likely to decrease in the west of the state because there are fewer data points and shrubland vegetation types are more difficult to model accurately. Wetlands and grasslands were also identified as problematic for the model.

The environment groups present at the meeting were told that the maps were never intended for use in regulation, and that their use in regulation would be ‘a concern’. They were also told that the new maps had no relevance for the pending *Biodiversity Conservation* and *Local Land Service Amendment* Bills. Subsequent information from OEH suggests otherwise.

It is clear from the original Environment Trust funding application for \$4.5 million that the map information was originally intended for a variety of regulatory function including:

1. Assessment of BioBanking vegetation;
2. Biodiversity certification;
3. Threatened species ‘regulatory and recovery efforts’;
4. Creation of Private Native Forestry Property Vegetation Plans;
5. Monitoring, Evaluation and Reporting by Catchment Management Authorities;
6. To inform Development Applications.

⁷² www.smh.com.au/environment/conservation/losing-the-plot-how-native-vegetation-mapping-went-feral-20160114-gm5xj9.html

⁷³ www.smh.com.au/environment/native-vegetation-mapping-saga-cover-up-and-money-wastage-claims-20160114-gm5zst.html

Furthermore, the “Upper Hunter Strategic Assessment”⁷⁴ was specifically a process that was to use the GHVMv4 (segmentation mapping) as its underpinning map along with the Biodiversity Forecasting Tool (which would use it as one of its main layers) to enact the new streamlined process of mine approvals. So the use of the maps for regulatory function was a very specific component of the federal government’s initiative to give 25-30 year approvals for mines and the example, if successful, was to be rolled out in other areas of the state using the State Wide Map.

The concerns raised from the December mapping meeting and via the Sydney Morning Herald stories led the National Parks Association of NSW (NPA) to write to Minister Speakman in February to seek assurance that the maps would not be used in the new legislation and to suggest improvements in the mapping approach. Quotes from staff at the Nature Conservation Council of NSW (NCC) and NPA contained in the Sydney Morning Herald stories also led to accusations of falsification and dishonesty from OEH to the aforementioned groups.

Segmentation map accuracy

1. *The Greater Namoi Mapping Report* (Hunter and Hawes 2013)

The Greater Namoi Mapping Report was undertaken by Dr John Hunter at the behest of the Namoi Catchment Management Authority in 2013. The report found that:

- Only 27% of plant community types (PCTs) were confidently mapped. 36% of PCTs were not modelled by the GNM and 37% of PCTs should not be relied upon;
- The report estimates that the GNM is between 33-44% accurate in the region. This is considerably lower than the 71.5% accuracy that was claimed in the OEH report;
- Wetlands were particularly poorly mapped in the GNM. One wetland type was identified in the GNM as 100% correct, while independent verification suggests closer to 10%. Many wetlands were mapped as non-native vegetation.

2. *The Greater Hunter Mapping Report* (Hunter 2015)

⁷⁴ Upper Hunter Strategic Assessment Habitat Review

The Upper Hunter Strategic Assessment (UHSA) is a collaboration between participating mining companies and the New South Wales and Federal Governments to develop a process for managing the impacts of future coal mining activities in the upper Hunter Valley on ‘biodiversity’ values. The main emphasis of the project is to provide a proactive assessment of cumulative impacts on a regional and sub-regional level rather than the traditional individual project by project assessment. The assessment will then allow for an extended understanding of potential cumulative regional impacts of coal mining development in particular on threatened species and ecological communities over a 25 to 30 year period. The assessment will improve the identification and securing of offsets for regional gains and improve the practice of rehabilitation of mined lands. Additional aims include alleviation of delays in negotiating and securing offsets and obtaining agreements on biodiversity assessment information.

The state wide map was to be used for:

- a) Identify areas of high conservation value that require protection
- b) Requirements for mitigation where areas of high conservation value may be indirectly impacted
- c) Offset mechanisms where clearing of native vegetation is proposed and the calculation of offset requirements
- d) Mechanisms to direct offsets to priority conservation areas, including the consideration of trust fund arrangements to strategically purchase offsets
- e) Rehabilitation requirements and obligations
- f) Identify adaptive management measures, including areas of uncertainties such as knowledge gaps

The Greater Hunter Mapping report was undertaken by Dr John Hunter at the behest of Hunter Councils in 2015. Key findings of the report included:

- Only 7% of Plant Community Types were found to be mapped to ‘high reliability’, while 75% were mapped so poorly that they are useless as planning tools;
- The (very coarse) 12 NSW Keith Formations were, on average, mapped with only 22% accuracy, and only two formations were assessed as ‘reliable’.
- Many TEC’s were either modelled partially or entirely incorrectly.

These findings were published in 2016 in the peer-reviewed journal *Ecological Management & Restoration* (Hunter 2016). The author concluded that “the GHM_v4 is of such a low level of accuracy within the upper Hunter as to be inherently unusable for broad-scale regional and local landscape planning or environmental assessment, including locating compensatory offsets for the loss of native vegetation due to development.”

A low point for OEH

The publication of Hunter (2016) led OEH scientists to respond and reject the criticism of their methods, asserting that Hunter’s validation was not robust and stating that “Map validation data that are ambiguously allocated to map units and collected via poorly designed sampling methods are not statistically reliable and will misrepresent map quality” (Roff et al. 2016). This in turn led to a further response by Dr Hunter, which highlighted that the criticisms of Roff et. al. (2016) applied to a greater extent to OEHs own work and that their criticism had been selective, in some cases inaccurate and had failed to apply the same criteria used to criticise Hunter (2016) to their own work (Hunter and Lechner 2016).

This criticism of selectivity by Hunter and Lechner (2016) is damning and a cause of great concern as Roff et. al. (2016) sought to discredit an independent validation of their work based on an incomplete analysis. Furthermore, they ignored the fact that many of the issues they raised with Dr Hunters analysis (which used a much greater sample size, covered more map units and had greater landscape representation than did the OEH mapping) applied to a greater extent to their own work. This either indicates a remarkable lack of understanding of the mapping methodology or a deliberate attempt to undermine an independent analysis for an unarticulated reason. Either way the apparent lack of scientific integrity is of extreme concern to the public.

Segmentation mapping and its relationship with the *Biodiversity Conservation and Local Land Services Amendment Acts*

Communications with OEH have somewhat clarified where segmentation mapping may fit in the new legislation. We have been told that it will be used in the Biodiversity Assessment Methodology (BAM) as a source of information to assessors (contrary to the mapping unit’s assertion that the mapping was irrelevant to the new legislation). This is a concern due to the demonstrated inaccuracy of the maps. Although the BAM will require an on-ground assessment by an ecologist, a potentially inaccurate starting point for any assessment is not positive and has the potential to result in poor outcomes.

Of greater concern—and yet unresolved—is how the segmentation maps will relate to clearing under self-assessable codes. Due to the breadth of codes and the scale of clearing permitted under them, it is likely that most clearing will not occur via the BAM pathway, particularly in the agricultural areas of NSW. The self-assessable nature of the codes means it is the landholders responsibility to identify the vegetation

type to be cleared and to identify a suitable set-aside based on the vegetation to be cleared. Given very few landholders are ecologically trained to be able to identify Plant Community Types and are not required to obtain a site visit from either a professional ecologist or Local Land Services staff, they will need to rely on the best available information. Should the segmentation maps be the only source of information available it seems inconceivable that they will not be used. This is of particular concern as the technique performs increasingly poorly towards the west of the state, which is the area of the state likely to experience the highest level of clearing under the new regime.

Unfortunately, OEH's statement to NCC and NPA in March 2016 that "the government has no current proposals to use PCT mapping in decisions relating to native vegetation clearing under Local Land Services codes" is rendered meaningless by the fact that the new legislation requires no decision making by a government authority for code-based clearing. For this reason we retain significant concerns that the publically-funded segmentation mapping will result in poor environmental outcomes for the public. We again assert that OEH should reconsider its vegetation mapping approach.

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