

NSW



**DEFENDING THE ENVIRONMENT
ADVANCING THE LAW**

Submission to the Inquiry into koala populations and habitat in New South Wales

prepared by

EDO NSW

9 August 2019

About EDO NSW

EDO NSW is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

Successful environmental outcomes using the law. With over 25 years' experience in environmental law, EDO NSW has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO NSW is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

EDO NSW is part of a national network of centres that help to protect the environment through law in their states.

Submitted to:

NSW Upper House Portfolio Committee No 7 – Planning and Environment
NSW Parliament
Macquarie St
Sydney NSW 2000

By email: portfoliocommittee7@parliament.nsw.gov.au

For further information on this submission, please contact:

Rachel Walmsley
Director, Policy & Law Reform
EDO NSW
T: 02 9262 6989
E: [rachel.walmsley\[at\]edonsw.org.au](mailto:rachel.walmsley@edonsw.org.au)

Cerin Loane
Senior Policy & Law Reform Solicitor
EDO NSW
T: 02 9262 6989
E: [cerin.loane\[at\]edonsw.org.au](mailto:cerin.loane@edonsw.org.au)

EDO NSW

ABN 72 002 880 864
Level 5, 263 Clarence Street
Sydney NSW 2000 AUSTRALIA
E: edonsw@edonsw.org.au
W: www.edonsw.org.au
T: + 61 2 9262 6989
F: + 61 2 9264 2412

CONTENTS

Introduction

1. Key recommendations
2. Summary of existing material and previous reviews, and focus of the current inquiry
3. RESPONSE TO TERMS OF REFERENCE

ToR (a) - The status of koala populations and koala habitat in New South Wales, including trends, key threats, resource availability, adequacy of protections and areas of further research

Status of koala populations and koala habitat in NSW, trends and key threats
Adequacy of protections – Nine overarching deficiencies

ToR (b) - The impacts of koalas and koala habitat from:

- (i) **The Coastal Integrated Forestry Operations Approvals and Regional Forest Agreements**
Overview of the regulatory framework for forestry operations on public land
Key observations about the RFAs and IFOAs
Recommendations
- (ii) **The Private Native Forestry Code of Practice**
Overview of the regulatory framework for PNF
Concerns about regulatory framework for PNF, including the PNF Code and Review
Recommendations
- (iii) **Old growth forest remapping and rezoning program**
Overview of the regulatory framework for old growth forests
Specific concerns with proposal to remap old growth forests
Recommendations
- (iv) **The 2016 land management reforms, including the Local Land Services Amendment Act 2016 and associated regulations and codes**
Overview of the land management reforms
Overarching concerns with the new land management framework
Recommendations

ToR (c) - The effectiveness of State Environmental Planning Policy 44 – Koala Habitat Protection, the NSW Koala Strategy and the Biodiversity Conservation Act 2016, including the threatened species provisions and associated regulations, in protecting koala habitat and responding to key threats

NSW Koala Strategy

Recommendations

Biodiversity Conservation Act and Regulation

Overview and key concerns

Recommendations

Koala SEPP

Key concerns

Recommendations

ToR (f) - Any other matter

Other laws and policies that impact on koala populations and habitat

Recommendation

Conclusion

ATTACHMENT 1: Previous EDO NSW submissions

INTRODUCTION

EDO NSW welcomes the opportunity to make a submission to the *Inquiry into koala populations and habitat in New South Wales*. As a community legal centre specialising in public interest environmental and planning law, we can assist the Committee to understand how the laws in NSW currently operate and interact to protect or hinder protection of koala populations and habitats in NSW.

Our submission is structured as follows:

1. **Key recommendations**
2. **Summary of existing material and previous reviews, and focus of current inquiry**
3. **Response to Terms of Reference A, B, C and F**

We also include links to previous submissions and reports of EDO NSW that will further assist the Committee to understand the broad range of legal issues affecting koala populations and habitats in NSW (see **Attachment 1**).

Through our work with EDO NSW clients and experts, we recognise that there is significant concern in the community about the decline in koala numbers in NSW and ongoing threats to koala populations and habitats.

Our submission highlights that there are significant deficiencies in NSW laws relating to the protection of koala populations and habitat. Recent initiatives by Government to address koala conservation have focused mainly on funding and policy initiatives, rather than improving the legislative protections that are urgently needed.

Given our expertise, this submission specifically focuses on addressing the deficiencies in the current legal framework, and therefore focuses on terms of reference (**ToR**) **A, B, C and F**. Our recommendations identify a number of overarching areas where urgent law reform is needed, and our detailed submissions listed in **Attachment 1** provide more specific recommendations for amendments to key pieces of legislation, regulations and policies.

We hope this Inquiry can look into the broad range of issues affecting koalas and make recommendations to strengthen laws to improve the outlook for this iconic species and reverse the trajectory of decline.

We are available to meet the Committee to discuss the current legal framework and opportunities for the necessary law reform.

1. KEY RECOMMENDATIONS

This submission makes 15 key recommendations in relation to Terms of reference B, C and F. Further detailed recommendations are in **Appendix 1**.

ToR (b) - The impacts of koalas and koala habitat from:

(i) The Coastal Integrated Forestry Operations Approvals and Regional Forest Agreements

Recommendation 1: That the Committee review public submissions and expert reports made during the review of the RFAs and Coastal IFOA and identify any recurring concerns that were unaddressed by the renewed RFAs and Coastal IFOA.

Recommendation 2: Revise RFAs and Coastal IFOAs to improve forestry practices and strengthen protections for koala populations and habitat, including that:

- a. The aim of 'no net loss to wood supply' be revised (and replaced with an alternative aim such as 'ecologically sustainable levels of wood supply');
- b. Clearer links be established between the specific principles of ESFM and the outcomes, conditions and operational protocols in the IFOA rules;
- c. Policy settings that allow unsustainable logging levels, such as intensive harvesting, be revised;
- d. Climate change considerations are better incorporated into RFAs and IFOAs.
- e. Compliance and enforcement of RFAs and IFOAs is improved, including restoration of third party rights to enforce forestry breaches;
- f. Specific provisions and conditions relating to koalas and koala habitat are strengthened, including increasing the retention rate of koala browse trees, and increasing minimum 'retained tree' diameter; and
- g. That forest monitoring and management be improved in line with the principles of ESFM

Recommendation 3: In light of the significant environmental impacts of logging native forests, including impacts on koalas, the Committee should recommend options for transitioning away from native forest logging on public land.

(ii) The Private Native Forestry Code of Practice

Recommendation 4: That the Committee should consider concerns raised by stakeholders as part of the current Private Native Forestry Review, and make recommendations for strengthening the legal framework for PNF to improve environmental outcomes for koala populations and habitat, including that:

- a) The Minister for the Environment have the primary responsibility for setting key parameters, including in the PNF Codes of Practice, and approving PNF plans;
- b) PNF be excluded from all koala habitat (based on an updated legal definition of 'koala habitat');
- c) Assessment and approval requirements be maintained for all scales of PNF, and that site threatened species and habitat surveys must be carried out by an accredited ecologist before logging operations can occur;

- d) The provisions for making and approving PNF Codes be strengthened to improve environmental outcomes, and ensure transparency and accountability in line with best-practice public participation;
- e) PNF codes provide clear, robust standards based on the best-available science, and protect all environmentally sensitive land from logging;
- f) Ecological prescriptions in PNF Codes are comprehensive and include all relevant threatened species and that the specific prescriptions for koalas in the current Codes be strengthened, with input from scientific experts;
- g) Draft PNF Codes are informed by a peer review by eminent ecologists to ensure biodiversity, water quality, threatened species, soil and carbon stores are protected, and the peer review is made publically available; and
- h) The provisions relating to PNF plans be strengthened to improve environmental outcomes, transparency and accountability, including that all approved PNF plans are published on a public register.

(iii) Old growth forest remapping and rezoning program

Recommendation 5: The NSW Government should invest in comprehensive and accurate mapping of vegetation and environmentally sensitive areas across NSW as required to underpin sustainable natural resource management under various pieces of legislation, rather than invest in remapping old growth areas to meet timber supply commitments. If the review of old growth remapping is continued, the NRC should explicitly identify and evaluate the impacts that remapping would have on listed species including koalas.

(iv) The 2016 land management reforms, including the Local Land Services Amendment Act 2016 and associated regulations and codes

Recommendation 6: Recommend the immediate release of the comprehensive NVR Map with all map categories including Category 1 (exempt land) and Category 2 (regulated land) displayed.

Recommendation 7: Make the following amendments to appropriately limit code-based clearing:

- a) Repeal the Equity and Farm Plan code, and review the other codes to assess their impacts on koala habitat;
- b) Expand the scope of environmentally sensitive areas that are exempt from clearing under the Native Vegetation Code (e.g. by expanding Category 2 (sensitive regulated land) to explicitly include and expanded range of important koala habitat);
- c) Remove the ability to discharge a landholder's obligation not to clear threatened species by claiming no knowledge;
- d) Require verification that code-based clearing proposals will not affect threatened species including koalas;
- e) Expanding powers for LLS staff to reject notifications or refuse to issue certificates because of unacceptable impacts on threatened species including koalas.

Recommendation 8: Amend land management laws to strengthen protections biodiversity, including for koala populations and habitat, including by:

- a) Expanding Category 2 (sensitive regulated land) to include actual and potential koala

- habitat, not just core koala habitat (based on an updated legal definition of 'koala habitat') and all endangered ecological communities (not just critically endangered);
- b) Reinstating a clear ban on broadscale land clearing and a standard to 'maintain or improve' environmental outcomes; and
 - c) Requiring decisions of the Native Vegetation Panel to be based on an objective and scientific assessment, and to be consistent with KPOMs made under the Koala SEPP.

ToR (c) - The effectiveness of State Environmental Planning Policy 44 – Koala Habitat Protection, the NSW Koala Strategy and the Biodiversity Conservation Act 2016, including the threatened species provisions and associated regulations, in protecting koala habitat and responding to key threats

NSW Koala Strategy

Recommendation 9: Recommend an urgent rewrite of the NSW Koala Strategy, which must include clear targets and effective mechanisms for curbing habitat loss, including a timetable for legislative reform.

Recommendation 10: Fully implement the Chief Scientist's recommendations, including but not limited to Recommendation 4 (legislative reform to strengthen planning laws to protect koala populations and habitat) and Recommendation 5 (legislative reform to biodiversity conservation and land management laws to strengthen protections for koala populations and habitat).

Biodiversity Conservation Act and Regulation

Recommendation 11: Important koala habitats should be identified and declared as Areas of Outstanding Biodiversity Value.

Recommendation 12: Reform biodiversity laws to strengthen protections for koala populations and habitat, including by:

- a) Re-introducing provisions to list specific koala populations as a separate listing, irrespective of whether a species is already listed;
- b) Giving stronger legislative effect to the Saving Our Species program;
- c) Strengthening the concept of 'serious and irreversible impacts'; and
- d) Extending the requirement to refuse development proposals that will have serious and irreversible impacts on biodiversity to state significant developments and infrastructure.

Recommendation 13: Strengthen the Biodiversity Offsets Scheme, including by:

- a) Imposing a clear and objective 'no net loss or better' environmental standard under the Biodiversity Offsets Scheme and Act;
- b) Ensuring that important koala habitat is not able to be offset (red light)
- c) Requiring genuine attempts to avoid and minimise impacts on threatened species are demonstrated before the Biodiversity Offsets Scheme can be applied;
- d) Requiring like for like offsets, including by removing the ability for proponents to offset impacts on koala populations with any other animal, and by imposing location

- requirements for 'like for like' offsets of 'species credit' species such as the koala;
- e) Removing the option to discount offset requirements based on non-ecological considerations; and
 - f) Significantly reducing flexibility of variation rules and indirect offset options.

Koala SEPP

Recommendation 14: That the Committee make specific recommendations regarding the finalisation of the review of *State Environmental Planning Policy 44 – Koala Habitat Protection* (SEPP 44), including a timeframe, and recommendations for amendments including that:

- a) The aims of the SEPP be expanded and include reference to the impacts of climate change
- b) The definition of 'koala habitat' (including the distinction between 'core' and 'potential' koala habitat) be updated based on expert scientific advice
- c) The 1 hectare requirement for triggering the Koala SEPP be removed;
- d) Comprehensive Koala Plans of Management be developed for all relevant local government areas within a particular timeframe;
- e) The Koala SEPP apply to a wider range of developments and land clearing proposals; and
- f) Monitoring, reporting, compliance and review of KPOMs be strengthened, with clear guidelines.

ToR (f) - Any other matter

Recommendation 15: Undertake a review of all other relevant legislation that impacts on koala conservation, to ensure a whole of government approach is coordinated to prevent the extinction of koalas in NSW.

2. SUMMARY OF EXISTING MATERIAL AND PREVIOUS REVIEWS, AND FOCUS OF THE CURRENT INQUIRY

We acknowledge that there is already a substantial amount of information in the public domain regarding koala populations and habitat in NSW. Most notably, we draw the Committee's attention to:

- Information made available online by the NSW Government, including information regarding the listing of the koala in NSW as a vulnerable threatened species and listing of endangered populations of koala,¹ and a specific website dedicated to information on protecting koala in the wild in NSW.²
- Key policy and program documents relating to koalas in NSW including the *NSW Koala Strategy*,³ *Recovery Plan for the Koala*,⁴ and the *Securing the Koala in the wild in NSW for 100 years Saving Our Species Iconic Koala Project 2017–21*.⁵
- The 2016 NSW Chief Scientist and Engineer's *Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW*.⁶

Additionally, recent Government policy and law reform processes across a range of subject areas including forestry, land management, biodiversity conservation and planning have provided the opportunity for experts and the community to raise concerns regarding the interaction between NSW policies and law, and koala conservation in NSW.

We recommend that the Committee considers the broad range of issues raised through the following recent review processes:

- Biodiversity Legislation Review (2014 -2016);⁷
- Review of *State Environmental Planning Policy 44 – Koala Habitat Protection* (2016-2017);⁸
- Review and remake of the *Coastal Integrated Forestry Operations Approvals* (2014 -2018);⁹
- Combined five-year reviews of the operation of the NSW *Regional Forest Agreements (RFAs)* for the period of 2004-2014 (2018);¹⁰
- Consultation on proposals to renew the New South Wales and Commonwealth RFAs (2018);¹¹

¹ See www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10616

² See <https://koala.nsw.gov.au/>

³ See www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/nsw-koala-strategy-18250.pdf

⁴ See www.environment.nsw.gov.au/research-and-publications/publications-search/recovery-plan-for-the-koala-phascolarctos-cinereus

⁵ See www.environment.nsw.gov.au/research-and-publications/publications-search/saving-our-species-iconic-koala-project-2017-to-2021

⁶ See www.chiefscientist.nsw.gov.au/_data/assets/pdf_file/0010/94519/161202-NSWCSE-koala-report.pdf

⁷ See <https://www.environment.nsw.gov.au/biodiversitylegislation/review.htm>

⁸ See <https://www.planning.nsw.gov.au/Policy-and-Legislation/State-Environmental-Planning-Policies-Review/Draft-koala-habitat-protection-SEPP>

⁹ See <https://www.epa.nsw.gov.au/your-environment/native-forestry/forestry-regulatory-reforms/coastal-ifo-remake>

¹⁰ See <https://www.epa.nsw.gov.au/your-environment/native-forestry/about-public-native-forestry/regional-forest-agreements-assessments/review-regional-forest-agreements>

- *Independent Review into the Decline of Koala Populations in Key Areas of NSW and development of the NSW Koala Strategy (2016-2018)*;¹² and
- Ongoing Private Native Forest Review (2018-2019).¹³

The issues raised during these review processes are relevant to the current inquiry. To further assist the Committee, we have included, a list of our relevant submissions and reports that identify key concerns regarding biodiversity conservation, natural resource management and koala conservation in NSW at **Attachment 1**. Key issues arising in these submissions as they relate to koalas are highlighted in our response to the ToRs below.

In light of the significant attention that has been given to koala conservation in recent years, and the extensive review and reform processes that have been undertaken by government in the areas of biodiversity conservation and land management, public forestry, private forestry and koala conservation, this inquiry can best add value by building on, rather than duplicating previous work. In particular, the committee is well-positioned to inquire into the cumulative impact of the various legal changes.

To that end, the recommendations within our submission identify a number of overarching areas where urgent law reform is needed, and our detailed submissions listed in **Attachment 1** provide more specific recommendations for amendments to key pieces of legislation, regulations and policies.

¹¹ See <https://www.dpi.nsw.gov.au/forestry/regional-framework>

¹² See <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/nsw-koala-strategy>

¹³ See <https://www.ils.nsw.gov.au/sustainable-land-management/pnforestry/private-native-forestry-review-2018>

3. RESPONSE TO TERMS OF REFERENCE

ToR (a) - The status of koala populations and koala habitat in New South Wales, including trends, key threats, resource availability, adequacy of protections and areas of further research

As outlined above, there is substantial information available to the committee regarding the status of koala populations and koala habitat in New South Wales, including trends and key threats. We expect that other stakeholders, including scientific experts will provide the Committee with additional evidence on this theme.

Our submission:

- Briefly summarises the status of koala populations and koala habitat in NSW; and
- Discusses the adequacy of protections, highlighting the significant overarching deficiencies in NSW laws that undermine effective koala conservation.

Status of koala populations and koala habitat in NSW, including trends and key threats

Koalas are listed as a vulnerable threatened species in NSW, meaning there is a high risk of extinction in the medium-term.¹⁴ Additionally, individual populations at Hawks Nest and Tea Gardens, between the Tweed and Brunswick Rivers east of the Pacific Highway, and within the Pittwater Local Government Area are listed as endangered populations.¹⁵

Accurately estimating koala numbers is difficult. Despite regulations, policies and community initiatives, overall koala numbers in NSW are in decline. In 2016, the NSW Chief Scientist relied on the figures of Adams-Hoskings *et al.* estimating approximately 36,000 koalas in NSW, representing a 26% decline over the past three koala generations (15-21 years).¹⁶ We note however that other reports suggest that koala numbers are lower than this.¹⁷

Koalas are known to occur in forests and woodlands, mainly across central and eastern NSW. Koalas also live in agricultural and urban landscapes, provided they have sufficient useable habitat trees and there are no overwhelming threats impacting ongoing survival.¹⁸

It is well established that habitat loss, fragmentation and degradation is the most significant threat facing NSW koala populations.¹⁹ Koala habitat loss is often driven by competing land

¹⁴ *Biodiversity Conservation Act 2016*, s 4.4(3)

¹⁵ See www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=20300; www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10615 and www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10614

¹⁶ NSW Chief Scientist & Engineer, *Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW*, December 2016 above no 6, citing Adams-Hosking, C, McBride, M.F, Baxter, G, Burgman, M, de Villiers, D, Kavanagh, R, Lawler, I, Lunney, D, Melzer, A, Menkhorst, P, Molsher, R, et al. (2016). *Use of expert knowledge to elicit population trends for the koala (Phascolarctos cinereus)*. Diversity and Distributions, 22(3), 249-262. doi: 10.1111/ddi.12400

¹⁷ See, for example, Paull, D., Pugh, D., Sweeney, O., Taylor, M., Woosnam, O. and Hawes, W. *Koala habitat conservation plan. An action plan for legislative change and the identification of priority koala habitat necessary to protect and enhance koala habitat and populations in New South Wales and Queensland* (2019), published by WWF-Australia, Sydney, which estimates koala numbers to be in the range of 15,000 to 25,000 animals. In 2018, the Australian Koala Foundations estimates koala numbers in NSW to be between 11,555 and 16,130 animals, see www.savethekoala.com/our-work/bobs-map-%E2%80%93-koala-populations-then-and-now

¹⁸ NSW Office of Environment and Heritage, *A Review of Koala Tree Use Across New South Wales*, July 2018, p4.

¹⁹ See Koala Recovery Plan 2008, above n 4; see also Office of Environment and Heritage, *NSW Koala Research Plan 2019 -28*, February 2019.

use pressures such as urban development, agriculture and industry. Climate change and extreme weather conditions pose looming threats to koala populations²⁰ and there is strong evidence to suggest that climate change interacts synergistically with threatening processes such as habitat loss and fragmentation.²¹ Other threats to koalas include disease, vehicle strike and dog attacks which are exacerbated by habitat loss and degradation. Stress and associated disease seen in koalas is often a result of koalas being forced from their habitat.²²

Adequacy of protections – Nine overarching deficiencies

Many of the recent initiatives by Government to address koala conservation have focused mainly on funding and policy, without substantial legislative or regulatory reform to increase legal protections for koala populations and habitat.

In our view there are significant overarching deficiencies in NSW laws that undermine effective koala conservation that cannot be addressed by aspirational (non-legislative) policies or strategies. Before we provide feedback on specific laws and policies identified by the TORs, we outline nine overarching deficiencies in NSW environment laws that exacerbate the threats to koalas in NSW, including from ongoing habitat loss.

- **Poor interaction between NSW laws** - In our view, contradictory policy settings in NSW laws undermine efforts to protect biodiversity, including koala populations and habitat. The *Biodiversity Conservation Act 2016 (BC Act)* (which itself has its own deficiencies, as discussed in response to ToR (c)) aims to conserve biodiversity and maintain the diversity and quality of ecosystems and provides mechanisms for listing threatened species and key threatening processes (KTPs).²³ Yet other legislation such as the *Local Land Services Act 2013 (LLS Act)*, *Forestry Act 2012 (Forestry Act)* and *Environmental Planning and Assessment Act 1979 (EP&A Act)* facilitate forestry, agricultural activities and developments that exacerbate the identified key threats to listed species. For example, under the EP&A Act State significant development can still be approved despite having significant or irreversible impacts on biodiversity (including threatened species and critically endangered ecological communities). The LLS Act allows mature paddock trees to be removed without proper environmental assessment despite the loss of hollow bearing trees identified as a key threatening process under the BC Act. This means that although koalas are listed under one piece of legislation, habitat loss is facilitated under other legislation.
- **Failures to prohibit or strictly limit the clearing of koala habitat** - NSW laws do not prohibit the clearing of koala habitat. Rather than providing outright prohibitions or strict limits on clearing koala habitat, our laws simply create additional obligations for assessing and considering impacts on koalas, but retain discretionary decision-making powers that often allow economic and social considerations to trump

²⁰ NSW Office of Environment and Heritage, *A review of koala tree use across New South Wales*, (2018), above no. 19

²¹ NSW Chief Scientist & Engineer, *Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW*, December 2016, www.chiefscientist.nsw.gov.au/_data/assets/pdf_file/0010/94519/161202-NSWCSE-koala-report.pdf, p13

²² See, for example, Narayan, E. *Physiological stress levels in wild koala sub-populations facing anthropogenic induced environmental trauma and disease* (2019), *Nature, Scientific Reports* volume 9, Article number: 6031 (2019), available at www.nature.com/articles/s41598-019-42448-8

²³ Key threatening processes are those that adversely affects threatened species, populations of a species or ecological communities or could cause species, populations of a species or ecological communities to become threatened. KTPs include clearing native vegetation and loss of hollow bearing trees. For more information see <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/about-threatened-species/key-threatening-processes>

environmental considerations. The result is that koala habitat is often allowed to be cleared for development, infrastructure or agricultural purposes.

- **Weak biodiversity offsetting rules** - The current policy settings for biodiversity offsetting in NSW (introduced by the new Biodiversity Offsets Scheme as part of the Biodiversity Legislation Review) do not meet best-practice and undermine what protections there are for koala habitat. For example, the rules do not require 'like-for-like offsetting' and allow supplementary measures and monetary payments in lieu of genuine offsets (see further our discussion on the Biodiversity Offset Scheme below in response to TOR (c) below). This means impacts on local populations of koalas can be offset by indirect measures that do not actually benefit that population.
- **Reliance on concept of 'core koala habitat'** – Many NSW laws rely on the concept of 'core koala habitat' established through the Koala SEPP. For example, for the purpose of the land management regime under Part 5A of the LLS Act, category 2-sensitive regulated land (on which clearing is more strictly regulated) is to include 'core koala habitat'. For the purpose of private native forestry, current PNF codes provide that forest operations are not permitted within any area identified as 'core koala habitat' within the meaning of the Koala SEPP.²⁴ However, as outlined in response to the TORs below, we have concerns regarding the definition of 'core koala habitat' and the failure to complete the identification of 'core koala habitat' through the finalisation of plans of management approved under the Koala SEPP. This has meant that important habitat that should be protected for koalas is not.
- **Increased reliance on self-assessable codes** – We are concerned with an increased reliance on 'self-assessable codes' for tree clearing in NSW. For example, the land management reforms introduced the broad-reaching *Land Management (Native Vegetation) Code 2018*, meaning that a landholder can self-assess clearing in koala habitat that is not currently recognised as 'core' and mapped accordingly. A similar approach has been suggested for PNF as part of the current PNF Review. EDO NSW has significant concern with the increased reliance on codes in place of a robust environmental assessment and determination process where listed species are involved. Codes are only an appropriate regulatory tool for *low risk* activities. The use of self-assessable codes increases the risk that habitat needed for koalas will be inadvertently cleared, or cleared due to lower standards of environmental oversight.
- **Failure to assess cumulative impacts** - There are no legal mechanisms for addressing and monitoring cumulative habitat loss and impacts on koala populations as a result of competing land uses such agriculture, industry and development. This can result in 'death by a thousand cuts' where incremental clearing under various legal frameworks can lead to significant cumulative habitat loss.
- **Poor monitoring, compliance and enforcement** – We have long-standing and recurring concerns across various legal frameworks (whether land clearing, forestry or development) about poor compliance and enforcement. For example, EDO's report *If a Tree Falls: Compliance failures in the public forests of New South Wales* (2011) analysed failures in compliance in NSW public forests.²⁵ More recently, we are very concerned that the NSW Government has announced an amnesty on new investigations of breaches under the former *Native Vegetation Act 2003* from August.

²⁴ See the Koala prescriptions in each of the PNF Codes of Practice, available at www.lls.nsw.gov.au/sustainable-land-management/pnforestry/private-native-forestry-code-of-practice

²⁵ EDO NSW, *If a Tree Falls: Compliance failures in the public forests of New South Wales* (2011), available at [www.edonsw.org.au/if a tree falls compliance failures in the public forests of new south wales](http://www.edonsw.org.au/if-a-tree-falls-compliance-failures-in-the-public-forests-of-new-south-wales)

This undermines the rule of law by setting a dangerous precedent, and rewards those who have may have undertaken illegal action in the past.²⁶

- **Failure to embed climate change considerations into legislation** – EDO NSW has ongoing, overarching concerns that NSW laws are not climate-ready and that more must be done to embed climate change considerations into NSW laws, both in terms of emissions reduction and climate adaptation. With respect to koalas, we note that our laws should require that the identification and protection of koala habitat should include areas needed as climate refugia for koalas.
- **Ongoing trend in weakening environmental protections** – Finally, we note our general concern with the ongoing trend in recent years of ignoring scientific and expert advice and weakening environmental laws. For example, the new biodiversity and land management framework (discussed in more detail at TOR(b)(iv)) has been highly criticised by scientists²⁷, EDO NSW²⁸ and other stakeholders including farmers,²⁹ for weakening land clearing controls. These concerns have recently been validated by the recent report from the NSW Audit Office that found that clearing of woody vegetation is increasing and so is the extent of unexplained clearing, which has almost doubled from 5,600 hectares in 2013-14 to 10,300 hectares in 2016-17.³⁰ Similarly, the Government has been criticised for renewing Regional Forestry Agreements for another 20 years despite concerns about the ability for the RFAs to maintain environment outcomes³¹.

²⁶ See The Guardian, *NSW farmers granted amnesty for illegal land-clearing*, 1 August 2019,

www.theguardian.com/australia-news/2019/aug/01/nsw-farmers-granted-amnesty-for-illegal-land-clearing

²⁷ See ABC News, 7 July 2016, *Scientists urge tightening of land-clearing laws in Australia*; Sydney Morning Herald, 7 July 2016, *'Utterly unsustainable': Scientists warn koalas at risk as bulldozers let loose*

²⁸ https://www.edonsw.org.au/new_biodiversity_land_clearing_and_vegetation_laws_what_next

²⁹ See ABC News, 21 September 2016, *Proposed NSW land-clearing, biodiversity laws dealt blow in submissions*; ABC News 17 July 2016, *Farmers divided over changes to NSW land-clearing laws*

³⁰ Audit Office of New South Wales, *Managing Native Vegetation*, 27 June 2019, available at www.audit.nsw.gov.au/our-work/reports/managing-native-vegetation

³¹ See https://www.edonsw.org.au/nsw_forestry_reform; see also Lindenmayer, D. B., D. Blair, L. McBurney, and S. C. Banks. 2015. The need for a comprehensive reassessment of the Regional Forest Agreements in Australia. *Pacific Conservation Biology* 24: 266-270

ToR (b) - The impacts of koalas and koala habitat from:

(i) the Coastal Integrated Forestry Operations Approvals and Regional Forest Agreements

Forestry operations have significant environmental impacts, including impacts on habitat used by threatened species, impacts on water and soil quality and soil erosion impacts on the climate. Because of these significant impacts, forestry operations have been shown to have significant detrimental impacts on koala populations and habitat.

This section of our submission:

- *Provides an overview of the regulatory framework for forestry operations on public land;*
- *Outlines key observations about the RFAs and IFOAs and their ability to maintain environmental values and protect koalas; and*
- *Makes specific recommendations for policy and law reform.*

Overview of the regulatory framework for forestry operations on public land

Forestry operations that involve the logging and harvesting of timber are permitted in native State forests in NSW. These forests are also home to many of the more than 1000 species being threatened with extinction in NSW.³² Forestry operations on public land are regulated by Regional Forest Agreements (**RFAs**) between the Commonwealth and NSW, Integrated Forestry Operations Approvals (**IFOAs**), and *the Forestry Act 2012*.

Experts and community groups have raised significant concerns regarding the logging of native forests, poor forestry operations practices and unworkable policy settings in NSW. Despite this, RFAs and coastal IFOAs have recently been renewed.³³ EDO NSW made a number of submissions regarding the review and renewal of the RFAs and Coastal IFOAs – see **Attachment 1**. These submissions set out our detailed concerns with poor performance of previous RFAs and IFOAs, with the proposed policy settings for the future RFAs and IFOAs, and make specific recommendations regarding the RFAs and IFOAs, including that forestry operations must be carried out in accordance with the principles of ecologically sustainable forestry management (**ESFM**). While the final Coastal IFOA did address some EDO concerns, including in relation to stream headwaters and hollow-bearing trees, the majority of EDO's key concerns and recommendations remain unaddressed. We note some stakeholders argue that the logging of native forests should cease.³⁴

³² See NSW State of the Environment Report (2018), available at www.soe.epa.nsw.gov.au/

³³ On 30 November 2018, the Commonwealth and NSW governments renewed the three NSW RFAs for the Eden, North East and Southern regions. This followed a review and consultation period and separate, belated five-yearly reviews of the former NSW RFAs. On 16 November 2018, the NSW Government remade the Integrated Forestry Operations Approvals for the Upper North East, Lower North East, Southern and Eden regions into one Coastal IFOA. This consolidated agreement sets the ground rules for logging along the entire NSW coast (excluding Wollongong and Greater Sydney) and tablelands - spelling out how the Regional Forest Agreements between the Commonwealth and NSW apply in practice. Other IFOAs are in place for the Brigalow Nandewar, South-Western Cypress and Riverina Red Gum regions, but have not been reviewed.

³⁴ See, for example, Doctors for the Environment Australia, *Submission regarding the proposed changes to timber harvesting in NSW's coastal forests*, July 2018, available at www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestagreements/coastal-ifo-2018/doctors-for-the-environment-australia.pdf ; see also National Trust of Australia, *Submission to the Draft Coastal Integrated Forestry Operations Approval*, June 2018, available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestagreements/coastal-ifo-2018/national-trust-of-australia-nsw.pdf>; see also National Parks Association of NSW *Forests for All – Case for Change* (2018), available at <https://npansw.org/wp-content/uploads/2018/06/Forests-For-All-Case-For-Change.pdf>

Key observations about the RFAs and IFOAs and their ability to maintain environmental values and protect koalas

In summary, we make the following key observations about the RFAs and IFOAs and their ability to maintain environmental values:

- **Specific concerns regarding provisions and conditions relating to koalas and koala habitat** - The Coastal IFOA does include specific provisions and conditions relating to koalas and koala habitat, however there are concerns that these do not provide specific enough protection for koalas. For example, EDO NSW has raised concerns regarding inadequate tree retention rates and thresholds in harvesting areas including for hollow-bearing trees and recruit trees, koala browse trees and giant trees. We have specifically recommended that North Coast koala protections should include higher levels of tree retention.³⁵ This is consistent with a precautionary approach that reflects the serious or irreversible threat of local extinctions and the uncertainty of predictive maps.
- **Twin policy commitments are not mutually achievable** - The Coastal IFOA is premised on the Government's twin commitments to maintain both environmental values and wood supply levels. A range of evidence demonstrates these two policy aims are 'not mutually achievable'.³⁶ Yet despite expert findings that environmental standards and wood supply levels are in fundamental conflict, to date there has been no reconsideration of the overarching policy aim of 'no net reduction in wood supply'. Given widespread recognition of the need for improved forestry regulation and outcomes that reflect a more environmentally sustainable industry, we strongly recommend the aim of 'no net loss to wood supply' be reconsidered. We suggest that an alternative aim could be "ecologically sustainable levels of wood supply". In order to meet this aim, a component of NSW's forestry management strategy should include structural adjustments to address the social impacts of any reduced levels of native forest logging.
- **Environmental values have not been clearly defined or monitored** - During the last 20 years of the existing IFOAs, environmental values were neither clearly defined nor effectively monitored.³⁷ The EPA and NRC have found that past and current forestry operations – including intensive harvesting – are neither best practice, nor necessarily even good practice.³⁸ This means environmental values continue to erode over time, and could take 'decades and centuries' to recover.³⁹ We note that the NRC is currently developing a Forestry Monitoring and Improvement Program that is intended to improve forest monitoring and management. Please refer to our submission on the NRC's draft

³⁵ For example, in our Submission on the Draft Coastal Integrated Forestry Operations Approval we recommended that North Coast koala protections:

- retain at least 25 koala browse trees per hectare in areas mapped as 'high' likelihood and habitat quality by both OEH and DPI;
- retain at least 20 browse trees per hectare in areas mapped as high/moderate by OEH and DPI;
- retain at least 15 browse trees per hectare in areas mapped as moderate by both OEH and DPI; and
- increase minimum 'retained tree' diameter from 20 to 25cm (DBHOB).

These recommendations were not adopted in the final Coastal IFOA - see clause 65 of the Coastal IFOA Conditions - <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestagreements/18p1177-coastal-ifo-a-conditions.pdf?la=en&hash=E437EFD84FE1B1002AFF69DB1A13336319FF5A56>

³⁶ NSW Natural Resources Commission (NRC), *Advice on Coastal Integrated Forestry Operations Approval remake* (November 2016), p 2.

³⁷ NRC, *Ibid*, p38

³⁸ NRC, *Ibid*, p35

³⁹ See comments of expert Brian Tolhurst in NSW Environmental Protection Authority *Remake of the Coastal Integrated Forestry Operations Approvals Final Report Threatened Species Expert Panel Review*, (2018) p 14 www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestagreements/18p0159-threatened-species-expert-panel-final-report.pdf

Forestry Monitoring and Improvement Program strategy for more detailed comments in this area – **Attachment 1**.

- **Principles of Ecologically Sustainable Forest Management (ESFM) need to be better embedded in the IFOAs and RFAs** - We are pleased to see that ESFM principles have been embedded into relevant legislation including the *Forestry Act 2012* (NSW) and the Commonwealth *Regional Forest Agreements Act 2002*.⁴⁰ However we suggest that clearer links are needed between specific principles of ESFM and the outcomes, conditions and operational protocols in the IFOA rules. For example, particular ESFM principles (such as the precautionary principle) should be referred to at key stages within the IFOA conditions and protocols. Additionally, we note that the EPA's indicators for ESFM can and should be used to monitor and report on the IFOA's effectiveness in implementing ESFM principles.⁴¹
- **Policy settings allow unsustainable logging levels** - We have particular concerns about specific policy settings in the Coastal IFOA that allow for unsustainable logging levels. For example, the widespread adoption of controversial intensive harvesting practices and some proposed harvesting limits (including intensive and mixed harvesting) may lead to significant risks to biodiversity and ESFM, without adequate complementary and compensatory protection measures (for example, an expanded reserves network). A two year transitional period that allows large-scale coupes and shortened return times, based on a legally-disputed practice of intensive harvesting, is highly problematic. We are concerned that this transitional arrangement prioritises short-term wood supply and jeopardises environmental outcomes, in a way that is inconsistent with ESFM. We are also opposed to proposals to remap old growth forest to meet shortfalls in wood supply. (See further our comments on old growth forest remapping below).
- **There is no consideration of climate change** - There is no clear Government policy response to prepare for the impacts of climate change and fire regimes on the State's forest ecosystems or wood supply – risks that are highlighted in the NRC's review (2016) and the NSW RFA review (2018). The impacts of increased extreme weather events such as bushfires on koalas have made international media.
- **Poor compliance and enforcement** - We have ongoing concerns relating to the monitoring and enforcement of forestry operations. In 2011 EDO NSW was commissioned to prepare a report showing evidence of systemic breaches of forestry regulations throughout all of NSW's public forests.⁴² In 2012 an Upper House Inquiry into the Performance of the EPA shone light on breaches of forestry operations at Royal Camp on the NSW. The EPA determined that the Forestry Corporation had not adequately implemented koala protection prescriptions in parts of the operations, particularly in Compartment 1 and yet inadequate penalties were given for such breaches, which had specific impacts on koalas. The NSW Land and Environment Court has said that "*the number of convictions suggests either a pattern of continuing disobedience in respect of environmental laws generally or, at the very least, a cavalier*

⁴⁰ *Regional Forest Agreements Act 2002* (Cth), s. 4, definition of *Regional Forest Agreement*.

⁴¹ NSW Environment Protection Agency, *Ecologically Sustainable Forest Management Criteria and Indicators for the NSW Forest Agreement regions*, 2016, available at <https://www.epa.nsw.gov.au/~media/EPA/Corporate%20Site/resources/forestagreements/revised-ecologically-sustainable-forestry-management-criteria-indicators-160178.ashx>

⁴² EDO NSW, *If a Tree Falls: Compliance failures in the public forests of New South Wales* (2011), available at [www.edonsw.org.au/if a tree falls compliance failures in the public forests of new south wales](http://www.edonsw.org.au/if-a-tree-falls-compliance-failures-in-the-public-forests-of-new-south-wales)

attitude to compliance with such law'.⁴³ While some improvements have been made since then including increased penalties introduced by the *Forestry Legislation Amendment Act 2018*, more must be done to address ongoing poor practices, breaches and inadequate enforcement. One way to improve this is to restore third party rights to enforce forestry breaches⁴⁴ consistent with long-established open standing rights in many NSW laws – including NSW planning, native vegetation, local government, water, mining, petroleum and Crown lands laws.

Recommendations

We make the following broad recommendations regarding forestry operations on public land. For more detailed recommendations see our detailed submissions provided on **Attachment 1**.

Recommendation 1: That the Committee review public submissions and expert reports made during the review of the RFAs and Coastal IFOA and identify any recurring concerns that were unaddressed by the renewed RFAs and Coastal IFOA.

Recommendation 2: Revise RFAs and Coastal IFOAs to improve forestry practices and strengthen protections for koala populations and habitat, including that:

- a. The aim of 'no net loss to wood supply' be revised (and replaced with an alternative aim such as 'ecologically sustainable levels of wood supply');
- a. Clearer links be established between the specific principles of ESFM and the outcomes, conditions and operational protocols in the IFOA rules;
- b. Policy settings that allow unsustainable logging levels, such as intensive harvesting, be revised;
- c. Climate change considerations are better incorporated into RFAs and IFOAs.
- d. Compliance and enforcement of RFAs and IFOAs is improved, including restoration of third party rights to enforce forestry breaches;
- e. Specific provisions and conditions relating to koalas and koala habitat are strengthened, including increasing the retention rate of koala browse trees, and increasing minimum 'retained tree' diameter; and
- f. That forest monitoring and management be improved in line with the principles of ESFM

Recommendation 3: In light of the significant environmental impacts of logging native forests, including impacts on koalas, the Committee should recommend options for transitioning away from native forest logging on public land.

⁴³ Justice Pepper, *Department of Environment, Climate Change and Water v Forestry Commission of NSW*, [2011] NSWLEC 102 [100]

⁴⁴ For further discussion, see EDO NSW, *Submission to Legislative Council Inquiry into the Forestry Legislation Amendment Bill 2018 (NSW)*, May 2018, available at https://www.edonsw.org.au/inquiry_forestry-amendment

**ToR (b) - The impacts of koalas and koala habitat from:
(ii) The Private Native Forestry Code of Practice**

Forestry operations on private land also have significant impacts on koalas. While this ToR relates specifically to the PNF Code of Practice, we believe it is important to consider the entire regulatory framework for PNF, including Part 5B of the LLS Act, and changes proposed by the current PNF Review.

This section of our submission addresses the following issues relating to Private Native Forestry (PNF):

- *Overview of the regulatory framework for PNF;*
- *Concerns about regulatory framework for PNF, including the PNF Code and changes proposed by the PNF Review; and*
- *Recommendations for policy and law reform.*

Overview of the regulatory framework for PNF

PNF refers to forestry operations on private land. The rules around PNF have undergone a number of changes in recent years. By way of background we note that:

- PNF was previously regulated under Part 5 of the *Native Vegetation Regulation 2013 (NV Regulation)*;
- On repeal of the NV Regulation, a new Part 5C was inserted into the *Forestry Act 2012* to regulate PNF (which commenced on 25 August 2017);
- On 30 April 2018, the Local Land Services (LLS) assumed responsibility for approvals and advisory services for PNF. The NSW Environment Protection Authority (EPA) maintains responsibility for compliance and enforcement of PNF; and
- On 9 November 2018, new provisions relating to PNF commenced under Part 5B of the *Local Land Services Act 2013 (LLS Act)* and Part 5C of the *Forestry Act 2012* was repealed.

Generally, the provisions allow forestry operations to be carried out on private land, if done in accordance with private native forestry plan that has been approved having regard to PNF Codes. We note that the PNF Codes include species-specific prescription for koalas.

The Government is currently undertaking a more detailed review of PNF in response to Recommendation 7 of the Independent Biodiversity Legislation Review Panel.⁴⁵

The Government consulted on terms of reference for the PNF Review in early 2019,⁴⁶ and a Submissions Review report was recently published summarising the key issues raised by

⁴⁵ See Byron N. et. al (2014) Independent Biodiversity Legislation Review Panel, *A review of biodiversity legislation in NSW, Final Report*, Recommendation 7:

- “Review regulatory arrangements for timber harvesting on private land as part of a separate process that:
- (a) does not regulate the harvesting of native timber on private land as a form of land use change
 - (b) considers options for regulating sustainable forestry operations based on their scale and intensity rather than tenure, including options for permitting low-intensity operations on private land without the need for approval and a focus on outcomes rather than process
 - (c) considers a range of options for improving the environmental performance of haulage and harvest contractors operating on private and public land, including licensing and minimum standards”.

The majority of the Independent Panel’s other recommendations were addressed through the Biodiversity Legislation Review that culminated in the repeal of the *Native Vegetation Act 2003*, *Threatened Species Conservation Act 1995*, *Nature Conservation Trust Act 2001* and parts of the *National Parks and Wildlife Act 1974*, and introduction of the *Biodiversity Conservation Act 2016* and new provisions in the *Local Land Services Act 2013*.

stakeholders in response to the Terms of Reference.⁴⁷ The Government has not yet provided a response to the submissions received or indicated whether it will undertake further legislative amendments to address the concerns raised by stakeholders. However, we note that it is the Government's intention to consult on new draft Private Native Forestry Codes of Practice are released on public exhibition later in 2019.

Concerns about regulatory framework for PNF, including the PNF Code and changes proposed by the PNF Review

The recently released *Private Native Forestry Review Terms of Reference Submissions Review Final Report*,⁴⁸ highlights that the impacts of PNF on koalas is a key concern for environment groups, local government and environmentally interested individuals:

"Koalas and koala habitat were largely discussed by environment groups, local government and environmentally interested individuals. Over three quarters of submitters from environment groups and local government discussed koalas (71% of local government and 69% of environment groups). A portion of these submitters raised decline in koala population and habitat as an important consideration for revision of the Codes. Some suggested that koala protections should be more stringent in the Codes".⁴⁹

For example, Kempsey Shire Council says that:

"The prescriptions within the PNF code for determining exclusion zones around koala food trees by checking for koala faecal pellets (scats) has significant issues in regards to reliability of classification of koala habitat. Koala scats can be difficult to identify without the skills and experience required to conduct koala scat searches".⁵⁰

"Council has a Comprehensive Koala Plan of Management, however the mapping contains very few land parcels identified as core koala habitat due to the costs associated with studies and mapping areas of core koala habitat. It is considered that PNF should also be excluded from areas mapped as primary koala habitat".⁵¹

Similarly, Coffs Harbour City Council says;

"Greater protection should be given the protection of threatened species habitat. For example the requirements that a Koala feed tree will only be retained if 20 or more scats are found is too high a bench mark. Even highly used trees may not have this many scats - and land holders are unlikely to look for scats as it will decrease profits and many land holders are unaware that koalas may be using the forest".⁵²

"It has been the experience of Coffs Harbour City Council that the code fails to protect koala habitat as its interpretation is too limited, there is a failure to adhere to the prescriptions and there is limited resources for compliance".⁵³

⁴⁶ See <https://www.ils.nsw.gov.au/sustainable-land-management/pnforestry/private-native-forestry-review-2018>

⁴⁷ Elton Consulting, *Private Native Forestry Review Terms of Reference Submissions Review Final Report*, Commissioned by NSW Local Land Service, 2019, available at https://www.ils.nsw.gov.au/_data/assets/pdf_file/0005/1148666/PNF-Review-Terms-of-Reference-Submissions-Review-Report.pdf

⁴⁸ Elton Consulting, *Private Native Forestry Review Terms of Reference Submissions Review Final Report*, Commissioned by NSW Local Land Service, 2019.

⁴⁹ *Ibid*, p 18

⁵⁰ https://www.ils.nsw.gov.au/_data/assets/pdf_file/0011/1148528/Submission-No.-120.pdf

⁵¹ *Ibid*

⁵² https://www.ils.nsw.gov.au/_data/assets/pdf_file/0010/1148464/Submission-2.pdf

⁵³ *Ibid*.

We also note that North East Forest Alliance submission to the PNF Review includes a specific case study on the ineffectiveness of the PNF framework to protect koalas.⁵⁴

EDO NSW has a range of concerns regarding the legal framework for PNF and proposed changes to PNF Codes.⁵⁵ Some of our key concerns, particularly those that may impact on koala populations and habitats are summarised below:

- **Application of PNF to environmentally sensitive areas** - PNF applies to any area of the State, other than those identified in section 60ZS of the LLS Act.⁵⁶ Currently, PNF is not explicitly excluded in environmentally sensitive areas such as threatened ecological communities, koala habitat or Ramsar wetlands. Exclusions must be expanded to prohibit PNF in all environmentally sensitive areas, including koala habitat. One way of doing this could be to exclude PNF from 'category 2-sensitive' and 'category 2 – vulnerable' lands identified under the LLS Act, as well as all threatened ecological communities.⁵⁷ We also note the need for an updated legal definition of 'koala habitat' to replace the concept of core koala habitat (see our discussion on SEPP 44 below, in response to ToR (c)).
- **Oversight of PNF** - We are concerned that responsibility for PNF has shifted from the Minister for the Environment and Office of Environment and Heritage (who had previous carriage of PNF) to the Minister for Lands and Forestry and the LLS. As the principles of ecologically sustainable forest management and the current objects set out in Part 5B of the LLS Act are predominantly focused on the protection of biodiversity and health of native forest, it is more appropriate for the Minister for the Environment to have the primary responsibility for setting key parameters, including in the PNF Codes of Practice, and approving PNF plans. This would ensure that regulating significant environmental impacts – including on iconic species such as koalas – is the responsibility of the appropriate Minister backed by relevant Departmental expertise.

⁵⁴ https://www.lls.nsw.gov.au/_data/assets/pdf_file/0006/1148586/Submission-No.-56.pdf

⁵⁵ EDO NSW, *Submission to the Private Native Forestry Review 2018*, available at

https://www.edonsw.org.au/private_native_forestry_review

⁵⁶ Areas currently off-limits to PNF include:

- (a) a State forest or other Crown-timber land within the meaning of the Forestry Act 2012,
- (b) a plantation within the meaning of the Plantations and Reafforestation Act 1999,
- (c) national park estate and other conservation areas referred to in section 60A (b),
- (d) land that is declared as a marine park or an aquatic reserve under the Marine Estate Management Act 2014,
- (e) land that is subject to a private land conservation agreement under the Biodiversity Conservation Act 2016,
- (f) land that is subject to be set aside under a requirement made in accordance with a land management (native vegetation) code under Part 5A,
- (g) land that is or was subject to a requirement to take remedial action to restore or protect the biodiversity values of the land under Part 5A or under the Biodiversity Conservation Act 2016, the Native Vegetation Act 2003 or the National Parks and Wildlife Act 1974,
- (h) land that is subject to an approved conservation measure that was the basis for other land being biodiversity certified under Part 8 of the Biodiversity Conservation Act 2016 or under any Act repealed by that Act,
- (i) land that is an offset under a property vegetation plan made under the Native Vegetation Act 2003 that remains in force or is a set aside area under a Ministerial order under Division 3 of Part 6 of the Native Vegetation Regulation 2013 that remains in force,
- (j) any area in which forestry operations cannot be carried out because of the requirements of any other Act or statutory instrument or any agreement or court order.

⁵⁷ Sensitive lands include critically endangered plants and ecological communities, core koala habitat and Ramsar-listed wetlands. Vulnerable lands include steep slopes, highly erodible soils and protected riparian areas. It is also noted that 'category 2-sensitive' land would only capture critically endangered ecological communities, so provisions must explicitly exclude PNF from all threatened ecological communities.

- **PNF Objects** - We generally support the current objects of Part 5B of the LLS Act, including the object that PNF be carried out in accordance with the principles of ESFM. These are defined in section 60ZQ of the LLS Act⁵⁸. However we make a number of suggestions to improve PNF objects and the definition of the principles of ESFM in line with best practice and to ensure that PNF objects are actually achieved in practice.⁵⁹
- **Making and approving PNF codes** - Part 5B, Divisions 2 and 3 of the LLS Act outlines the process for making and approving PNF codes that apply to PNF operations. While improvements were made when Part 5B of the LLS Act was introduced, we recommend a number of additional measures to improve environmental outcomes, and transparency and accountability in line with best-practice public participation.⁶⁰ Additionally, the PNF Code should not facilitate approving plans that have unacceptable impacts on koala habitat.
- **Content of PNF Codes** – PNF Codes must be strengthened to meet best-practice environmental standards. We would not support changes to the codes that would reduce environmental protections or open up more environmentally sensitive land to logging – particularly important koala habitat. We are concerned that the PNF Review is looking at options for regulating sustainable forestry operations based on their scale

⁵⁸ *principles of ecologically sustainable forest management* means the following—

- (a) maintaining forest values for future and present generations, including—
 - (i) forest biological diversity, and
 - (ii) the productive capacity and sustainability of forest ecosystems, and
 - (iii) the health and vitality of native forest ecosystems, and
 - (iv) soil and water quality, and
 - (v) the contribution of native forests to global geochemical cycles, and
 - (vi) the long term social and economic benefits of native forests, and
 - (vii) natural heritage values,
- (b) ensuring public participation, provision of information, accountability and transparency in relation to the carrying out of forestry operations,
- (c) providing incentives for voluntary compliance, capacity building and adoption of best-practice standards,
- (d) applying best-available knowledge and adaptive management processes to deliver best-practice forest management,
- (e) applying the precautionary principle (as referred to in section 6 (2) (a) of the *Protection of the Environment Administration Act 1991*) in preventing environmental harm

⁵⁹ Our specific recommendations for improving the objects relating to PNF are set out in more detail in *Submission to Private Native Forestry Review 2018* (Attachment 1), and include:

- Recommendation 5: Require PNF Codes to be consistent with the objects for PNF.
- Recommendation 6: Require consideration to be given to whether PNF plans are consistent with the PNF objects before plans are approved.
- Recommendation 7: Require the PNF objects to protect biodiversity and water quality and soil quality; and define biodiversity.
- Recommendation 8: Add an additional PNF object “to ensure the contribution of native forests to sustainable global carbon cycles”.

⁶⁰ Our specific recommendations for improving the process for making PNF Codes are set out in more detail in *Submission to Private Native Forestry Review 2018* (Attachment 1), and include:

- Recommendation 10: Extend the public consultation period on draft PNF codes to a minimum of three months.
- Recommendation 11: Require the Minister to make all submissions made on the draft code publically available.
- Recommendation 12: Require further public consultation on substantial changes to draft Codes following initial public consultation.
- Recommendation 13: Remove provisions specifying that failure to comply with the requirements for public consultation on draft codes does not prevent codes from being made or invalidate the code once made.
- Recommendation 14: Require draft PNF Codes to be informed by a peer review by eminent ecologists to ensure biodiversity, water quality, threatened species, soil and carbon stores are protected, and make the peer review publically available.
- Recommendation 15: Require public consultation on draft PNF plans prior to approval.
- Recommendation 16: Require all approved PNF plans to be contained in a public register.

and intensity rather than tenure, including options for permitting low-intensity operations on private land without the need for approval and a focus on outcomes rather than process”.⁶¹ In the context of changes to land management codes, EDO NSW has consistently raised concerns with the use self-assessable codes, including that reduced oversight and inadequate environmental assessment will lead to poor environmental outcomes.⁶² In the particular case of PNF, all commercial forestry operations warrant robust assessment and approval requirements as they can clearly be distinguished from genuine low-impact routine agricultural activities. We recommend that proposed draft PNF Codes be informed by a peer review by eminent independent ecologists to ensure biodiversity, water quality, threatened species, soil and carbon stores are protected. A specific element of a review should be the impact of PNF on koala populations.

- **Ecological prescriptions** - We have a number of concerns with the current ‘ecological prescriptions’ approach used in the current PNF Codes. For example: the Codes do not include prescriptions for all relevant listed threatened species, ecological prescriptions do not include habitat-based prescriptions for species groups that play a key role in maintaining ecosystem function and resilience, and ecological prescriptions are only triggered if threatened species are identified in existing records, or there is site evidence of a species.⁶³ We recommend that on-ground threatened species and habit surveys must be conducted by an accredited ecologist before logging operations can occur. Additionally, we recommend that the specific prescriptions for koalas in the current Codes be strengthened, with input from scientific experts.
- **Monitoring and reporting requirements** - Current legislative requirements for monitoring PNF are limited. The current provisions simply state that the EPA has the function of monitoring the carrying out of forestry operations.⁶⁴ Consideration should be given to formalising a process for monitoring PNF operations. This should include an assessment of the cumulative impacts of PNF on environmental assets over time, including koalas. Current PNF codes do require landowners to report on forestry operations, including the volume of timber harvested. This process should be formalised in legislation and reports should be made public. There should be a mechanism requiring PNF operators to report any koala impacts.
- **Investigation and enforcement** - We generally support the ongoing role of the EPA in investigating and enforcing forestry breaches. That said, we have acted for a number of community groups who have raised significant concerns about forestry breaches, flawed investigations and lack of enforcement. We strongly recommend that the EPA have the necessary executive support and resourcing to effectively carry out this important role. We support the current penalties relating to PNF including the penalties for causing significant harm to the environment.⁶⁵ We also support the open standing provisions that allow third parties to enforce breaches of PNF provisions⁶⁶ (and have

⁶¹ Byron N. et. al (2014) Independent Biodiversity Legislation Review Panel, *A review of biodiversity legislation in NSW, Final Report*, Recommendation 7(b).

⁶² See, for example, EDO NSW, *A legal assessment of NSW biodiversity legislation A report prepared for the Independent Biodiversity Legislation Review Panel*, September 2014, available at www.edonsw.org.au/a_legal_assessment_of_nsw_biodiversity_legislation

⁶³ For further detail see EDO NSW *Submission to Private Native Forestry Review 2018*, available at www.edonsw.org.au/private_native_forestry_review

⁶⁴ Section 60ZZB of the LLS Act.

⁶⁵ See section 60ZZA of the LLS Act.

⁶⁶ See section 13.14 of the *Biodiversity Conservation Act 2016*.

consistently argued that open standing should be extended to breaches of forestry rules on public land).⁶⁷

Recommendations

We make the following broad recommendations regarding forestry operations on private land. For more detailed recommendations see our detailed submissions provided on **Attachment 1**.

Recommendation 4: That the Committee should consider concerns raised by stakeholders as part of the current Private Native Forestry Review, and make recommendations for strengthening the legal framework for PNF to improve environmental outcomes for koala populations and habitat, including that:

- a) The Minister for the Environment have the primary responsibility for setting key parameters, including in the PNF Codes of Practice, and approving PNF plans;
- b) PNF be excluded from all koala habitat (based on an updated legal definition of 'koala habitat');
- c) Assessment and approval requirements be maintained for all scales of PNF, and that site threatened species and habitat surveys must be carried out by an accredited ecologist before logging operations can occur;
- d) The provisions for making and approving PNF Codes be strengthened to improve environmental outcomes, and ensure transparency and accountability in line with best-practice public participation;
- e) PNF codes provide clear, robust standards based on the best-available science, and protect all environmentally sensitive land from logging;
- f) Ecological prescriptions in PNF Codes are comprehensive and include all relevant threatened species and that that the specific prescriptions for koalas in the current Codes be strengthened, with input from scientific experts;
- g) Draft PNF Codes are informed by a peer review by eminent ecologists to ensure biodiversity, water quality, threatened species, soil and carbon stores are protected, and the peer review is made publically available; and
- h) The provisions relating to PNF plans be strengthened to improve environmental outcomes, transparency and accountability, including that all approved PNF plans are published on a public register.

⁶⁷ See, for example, EDO NSW, *A legal assessment of NSW biodiversity legislation A report prepared for the Independent Biodiversity Legislation Review Panel*, September 2014, available at www.edonsw.org.au/a_legal_assessment_of_nsw_biodiversity_legislation

**ToR (b) - The impacts of koalas and koala habitat from:
(iii) Old growth forest remapping and rezoning program**

There are significant community concerns regarding the program to reassess old growth forest mapping for coastal state forests currently being undertaken by the NSW Natural Resources Commission (NRC) for the NSW Government. The potential remapping of old growth will have impacts on a range of threatened species, including koalas.

This section of our submission:

- Provides an overview of the regulatory framework for old growth forests;
- Identifies specific concerns with the proposal to remap old growth forests; and
- Makes recommendations of policy and law reform.

Overview of the regulatory framework for old growth forests

Old growth forests are defined as ecologically mature forests where the effects of disturbances are now negligible.⁶⁸ Old growth forests have significant biodiversity value and are recognised and protected under NSW legislation through declarations of 'special management zones' (SMZs) under the *Forestry Act 2012*.⁶⁹ Logging and forestry operations are prohibited in SMZs.⁷⁰ Declarations of special management zones can only be revoked (either wholly or in part) by an Act of Parliament⁷¹ or in certain circumstances by the Governor.⁷² High conservation value old growth forests in Upper North East NSW are also listed as a state significant heritage item under the *Heritage Act 1977*.⁷³

In 2016 the Natural Resources Commission was asked to review settings for the new Coastal IFOA. As part of that review the NRC, the Commission reported there would be an estimated shortfall of wood supply.⁷⁴ Subsequently the Commission was asked to provide supplementary advice on whether the NSW Government could remap and rezone old growth forest and rainforest address the shortfall of wood supply associated with its previous advice.⁷⁵ The Commission undertook a pilot study to remap old growth and rainforests on 13 sites. It identified significant errors in current old growth and rainforest mapping, both in terms of forest extent and location. The Commission is now conducting a program to reassess old growth forest mapping of all coastal state forest.⁷⁶

Specific concerns with proposal to remap old growth forests

We do not support the Government's decision to make-up potential wood supply shortfalls by remapping old growth forest, particularly when alternatives - such as buybacks of timber allocations - are available. The long-term values of healthy forests for the people of NSW are highly likely to outweigh the short-term costs of buybacks.

⁶⁸ As accepted by the *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*.

⁶⁹ *Forestry Act 2012*, section 18. This includes SMZs zones declared under the now repealed *Forestry Act 1916*.

See *Forestry Act 2012* Sch 3, cl 7.

⁷⁰ *Forestry Act 2012* section 19.

⁷¹ *Forestry Act 2012* section 18(4).

⁷² *Forestry Act 2012* section 20.

⁷³ <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5051503>

⁷⁴ NSW Natural Resources Commission, *Advice on Coastal Integrated Forestry Operations Approval Remake*, November 2016, available at <https://www.nrc.nsw.gov.au/ifo>

⁷⁵ NSW Natural Resources Commission, *Supplementary Advice on Coastal Integrated Forestry Operations Approval Remake Old Growth Forests and Rainforests - North Coast State Forests*, March 2018 at <https://www.nrc.nsw.gov.au/ifo>

⁷⁶ See <https://www.nrc.nsw.gov.au/old-growth>

Areas mapped as old growth have been protected for decades as a result of hard-won local community campaigns. They are a key source of hollow-bearing trees and valuable habitat that reduce key threatening processes, and provide an insurance policy against over-harvesting elsewhere. Even if some areas are found not to meet the definition of 'old growth' forest, they are still likely to have significant ecological value, particularly as they have been relatively undisturbed due to their current old growth status.

There is also a risk that remapping old growth forest could validate past illegal logging practices, particularly given poor monitoring and compliance.

There are alternatives to remapping Old Growth Forest to log areas where mapping is outdated. Easing the pressure on wood supply is likely to deliver higher long-term environmental outcomes, a more sustainable industry, more cohesive social benefits, reduced conflict and positive community outcomes.

Recommendations

Recommendation 5: The NSW Government should invest in comprehensive and accurate mapping of vegetation and environmentally sensitive areas across NSW as required to underpin sustainable natural resource management under various pieces of legislation, rather than invest in remapping old growth areas to meet timber supply commitments. If the review of old growth remapping is continued, the NRC should explicitly identify and evaluate the impacts that remapping would have on listed species including koalas.

ToR (b) - The impacts of koalas and koala habitat from:

(iv) The 2016 land management reforms, including the Local Land Services Amendment Act 2016 and associated regulations and codes

As noted, clearing of koala habitat is the major threat and cause of koala decline. Measures to save the koala in NSW must include reforms to tighten the laws that are currently allowing increased areas of habitat to be cleared.

This section of our submission focuses on how tree clearing is now regulated under the land management framework in Part 5A of the *Local Land Services Act 2013* (**LLS Act**) and associated regulations and codes. This section:

- Provides an overview of the land management reforms introduced by the *Local Land Services Amendment Act 2016* and associated regulations and codes;
- Outlines overarching concerns with the new land management framework; and
- Makes recommendations for policy and law reform.

Overview of the land management reforms introduced by the Local Land Services Amendment Act 2016 and associated regulations and codes

In 2016, following the Biodiversity Legislation Review, the NSW government made major changes to the laws in NSW that protect native vegetation and threatened species, including:

- Repealing the *Native Vegetation Act 2013* (**NV Act**), *Threatened Species Conservation Act 1995*, *Nature Conservation Trust Act 2001* and sections of the *National Parks and Wildlife Act 1974*.
- Introducing a new land management framework under Part 5A of the *Local Land Services Act 2013* (**LLS Act**) and associated regulations and codes; and
- Introducing a new *Biodiversity Conservation Act 2016* (**BC Act**) and regulations.

The new land management framework regulates the clearing of vegetation on rural land.⁷⁷ It creates different approval pathways depending on the scale of clearing. Certain low-impact activities are described as 'allowable activities' and can be carried out without approval or other authorisation. A substantial range of activities can be carried out with notification or certification if they comply with the *Land Management (Native Vegetation) Code* (**Native Vegetation Code**). Substantial concerns have been raised regarding the scope of that Code. Higher impact clearing requires approval from the Native Vegetation Panel, and requires biodiversity assessment to be carried out in accordance with provisions of the BC Act.

This section focuses on the new land management framework under Part 5A of the LLS Act, and we address the *BC Act* under TOR (c). We note that the TORs do not refer specifically to another element of the reforms - the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (**Vegetation SEPP**). We suggest the Committee consider the strength of the Vegetation SEPP to provide robust protection for actual koala habitat in non-rural areas or e-zones, particularly given the lack of specific requirements for Councils to update Development Control Plans in order to enliven requirements to obtain a permit for vegetation clearing that falls under the BOS threshold.

⁷⁷ *Local Land Services Act 2013*, s60A

Substantial information regarding the Biodiversity Legislation Review and the new laws is available on the EDO website. We have also included our submissions to the Biodiversity Legislation Review, which set out our key concerns and recommendations, in **Attachment 1**.

EDO NSW overarching concerns with the new land management framework

It is now clear that changes to the LLS Act made by the insertion of Part 5A and the introduction of the Native Vegetation Code have weakened protections for native vegetation and have opened large areas of koala habitat in rural NSW to clearing without the need for any formal assessment or approval. It is particularly worrying that the Minister for the Environment signed off on the Native Vegetation Code despite expert advice that the laws would expose 99% of koala habitat on private land to clearing.⁷⁸

Data recently released by the Office of Environment and Heritage (OEH) indicates that rates of native vegetation clearing for agriculture have increased from 8500 ha in 2011-12 to 27,100 ha in 2017-18.⁷⁹ In addition, the Audit Office of NSW has also recently reported that clearing of vegetation on rural land is not effectively regulated and managed because the processes in place to support the regulatory framework are weak and there is no evidence-based assurance that clearing of native vegetation is being carried out in accordance with approvals.⁸⁰ Despite the fact that the new land management and biodiversity framework has been in place for two years, key components of the legal framework are still missing while clearing of habitat is increasing.

Our key concerns are summarised as follows:

- ***The new land management regime facilitates broad-scale land clearing*** – The repeal of the NV Act removed the objective of preventing broadscale land-clearing and the requirement to ensure clearing ‘improves or maintains environmental outcomes’ – either at the site scale or at the landscape scale. The replacement land management framework established by Part 5A of the LLS Act introduces a system that is less stringent (allowing increased clearing), less evidence-based (with more reliance on self-assessment) and less accountable (with less detailed information available on public registers).
- ***The Native Vegetation Code allows clearing without robust environmental assessment*** - A substantial amount clearing can be carried out with notification or certification if it complies with the Native Vegetation Code. The Code is an extremely risky and inappropriate regulatory tool for managing biodiversity loss, including koala populations in rural areas. The Code permits broadscale clearing without any formal assessment or approval requirements and exacerbates key threatening processes⁸¹ and extinction risks. There is limited ability for LLS to refuse certification and prevent unacceptable and cumulative impacts on threatened species.⁸² An arbitrary set ratio for determining set asides does not achieve no net loss. Regulations lack requirements for establishing set asides to ensure biodiversity values are actually compensated. The

⁷⁸ As revealed by a document released under Freedom of Information laws, prior to the Code coming into effect the OEH had warned the NSW Government that 99% of koala habitat in rural areas would be exposed to Code-based clearing. See <https://www.nature.org.au/media/287234/gipa945-ir-document-3.pdf>

⁷⁹ See rates of woody vegetation loss from crop, thinning or pasture, NSW Woody Vegetation Change 2017-18 spreadsheet, tab 1. Available from <https://www.environment.nsw.gov.au/vegetation/reports.htm>.

⁸⁰ Audit Office of New South Wales, *Managing Native Vegetation*, 27 June 2019.

⁸¹ Such as clear native vegetation and loss of hollow bearing trees.

⁸² The Auditor-General has raised similar concerns regarding the limited ability for LLS to refuse an application for a certificate even if LLS is concerned about the level of impact of the clearing and how well it will be managed. See Audit Office of New South Wales, *Managing Native Vegetation*, 27 June 2019, p. 16.

Regulations do not specify that the vegetation to be set aside should be the same (or of ecological equivalence) and what condition the vegetation should be in.⁸³

- ***The Native Vegetation Code does not provide sufficient protections for threatened species or endangered ecological communities*** - Currently, only 'core koala habitat' cannot be cleared under the Code. As outlined below, the concept of 'core koala habitat' is too narrow, meaning that koala habitat is at risk. Additionally, protections for endangered ecological communities are also weak, with only *critically* endangered ecological communities exempt from clearing under the Codes. Additional safeguards that could be put in place to strengthen protections are absent. For example, clearing under the Code should not be authorised if a landholder knows or 'ought reasonably to know' that the clearing harms a threatened animal species such as the koala. However, the Code currently allows for any obligation not to clear to be discharged by claiming no knowledge. There is no safety net - ie, that the regulations require verification that code-based clearing proposals will not affect threatened ecological communities, species or habitat.
- ***The Native Vegetation Regulatory Map has not been finalised*** - The NVR map is intended to categorise land across NSW to identify where the rules apply. The NVR map is intended to identify three categories of land: Category 1 (exempt land) is rural land where clearing can occur without needing an approval; Category 2 (regulated land) is rural land where clearing can occur under an allowable activity, a self-assessed code or with approval from the Native Vegetation Panel; and Category 3 (excluded land) is other land where the laws don't apply, such as national parks and urban areas. While there has been some mapping of Category 2 land that identifies vulnerable regulated land and sensitive regulated land, in the time since Part 5A was introduced, no complete NVR map has been released. Currently the map only shows the excluded land (Category 3) and the sensitive and vulnerable areas of regulated land (Category 2). This means there is no final map showing whether the vast majority of the state is regulated or unregulated land. An incomplete NVR Map that does not show whether the vast majority of the state is regulated or unregulated land puts LLS staff under pressure⁸⁴ and remaining koala habitat at higher risk of mistaken or illegal clearing. It is inappropriate and risky to expect landholders to self-categorise their land whilst transitional arrangements are still in place. An incomplete map also makes an already confusing regulatory scheme even more difficult to navigate for landholders and members of the public alike.
- ***Approvals by the Native Vegetation Panel*** – Another missing element of the land management regime is an active and effective Native Vegetation Panel (established under the LLS Act⁸⁵). In theory, land clearing that can't be done under the Native Vegetation Code, or as an allowable activity under the LLS Act (including clearing of core koala habitat), requires approval by the Native Vegetation Panel. However, after 2 years there is no publically available information about the panel actually assessing applications. This suggests that all current clearing of koala habitat is being done under the Code or an allowable activity exemption. Where applications do go to the Panel, it has discretion to approve significant clearing activities with no obligation to ensure clearing proposals 'maintain or improve' environmental outcomes. Whilst we welcome the requirement that applications must be refused if the proposed clearing is likely to

⁸³ These types of deficiencies have been identified by the Auditor –General, p 21.

⁸⁴ The Natural Resources Commission has found that a lack of a publicly available map with all categories mapped creates risk for LLS in providing consistent and accurate advice. See Natural Resources Commission, Audit of Local Land Services' implementation of sustainable land management reforms, October 2018, p 13. Available at www.nrc.nsw.gov.au/audit-and-assurance, p13

⁸⁵ *Local Land Services Act 2013*, s 60ZF(6).

have 'serious and irreversible impacts' on biodiversity values, this needs to be an objective and scientific assessment of serious and irreversible impacts, not a subjective test.⁸⁶ See our below (in response to ToR (c)) on the 'serious and irreversible impacts' test. For consistent protection of koala populations and habitat, approvals for rural land-clearing by the Native Vegetation Panel should, for example, include a requirement that land clearing is consistent with a KPOM.

Recommendations

Recommendation 6: Recommend the immediate release of the comprehensive NVR Map with all map categories including Category 1 (exempt land) and Category 2 (regulated land) displayed.

Recommendation 7: Make the following amendments to appropriately limit code-based clearing:

- a) Repeal the Equity and Farm Plan code, and review the other codes to assess their impacts on koala habitat;
- b) Expand the scope of environmentally sensitive areas that are exempt from clearing under the Native Vegetation Code (e.g. by expanding Category 2 (sensitive regulated land) to explicitly include an expanded range of important koala habitat);
- c) Remove the ability to discharge a landholder's obligation not to clear threatened species by claiming no knowledge;
- d) Require verification that code-based clearing proposals will not affect threatened species including koalas;
- e) Expanding powers for LLS staff to reject notifications or refuse to issue certificates because of unacceptable impacts on threatened species including koalas.

Recommendation 8: Amend land management laws to strengthen protections biodiversity, including for koala populations and habitat, including by:

- a) Expanding Category 2 (sensitive regulated land) to include actual and potential koala habitat, not just core koala habitat (based on an updated legal definition of 'koala habitat') and all endangered ecological communities (not just critically endangered);
- b) Reinstating a clear ban on broadscale land clearing and a standard to 'maintain or improve' environmental outcomes; and
- c) Requiring decisions of the Native Vegetation Panel to be based on an objective and scientific assessment, and to be consistent with KPOMs made under the Koala SEPP.

⁸⁶ *Local Land Services Act 2013*, s 60ZF(6).

ToR (c) - The effectiveness of State Environmental Planning Policy 44 – Koala Habitat Protection, the NSW Koala Strategy and the Biodiversity Conservation Act 2016, including the threatened species provisions and associated regulations, in protecting koala habitat and responding to key threats

In this section, we provide feedback on each of:

- *The NSW Koala Strategy;*
- *The Biodiversity Conservation Act 2016; and*
- *State Environmental Planning Policy 44 – Koala Habitat Protection (Koala SEPP).*

We also refer to the Committee to the substantial comments we have provided in previous submissions regarding the effectiveness of the *Biodiversity Conservation Act 2016*, the Biodiversity Assessment Method, the *NSW Koala Strategy* and the *Koala SEPP* – see **Attachment 1**.

NSW Koala Strategy

In 2016 the NSW Chief Scientist and Engineer made 11 broad recommendations for the development of a NSW Koala Strategy⁸⁷, including recommendations that the Government ‘improve outcomes for koalas through changes to the planning system’ (Recommendation 4) and ‘improve outcomes for koalas through the Biodiversity Conservation Bill and associated Regulations’ (Recommendation 5).

The subsequent NSW Koala Strategy released by the Government in 2018 has fallen far short of expectations and has been highly criticised for not providing the level of protection needed to protect and restore koala populations and habitat. One of the biggest flaws of the strategy is its failure to address the major threat of habitat loss. Despite the Chief Scientist’s recommendations, the NSW Koala Strategy does not include any program or timeframe for law reform to prevent inappropriate broadscale land clearing and destruction of koala habitat from development, agriculture, forestry or other industries.

We note that environment groups have conducted an assessment of the NSW Koala Strategy against Recommendations made in the Independent Review into decline of koalas in NSW.⁸⁸ That assessment found that of the 11 recommendations made by the NSW Chief Scientist to save koalas, the report finds that only two were fully addressed. Five recommendations were partially addressed, two were poorly addressed, and two were not addressed.

Recommendations

Recommendation 9: Recommend an urgent rewrite of the NSW Koala Strategy, which must include clear targets and effective mechanisms for curbing habitat loss, including a timetable for legislative reform.

Recommendation 10: Fully implement the Chief Scientist’s recommendations, including but not limited to Recommendation 4 (legislative reform to strengthen planning laws to protect

⁸⁷ NSW Chief Scientist & Engineer, *Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW*, December 2016.

⁸⁸ Blanch, S., Sweeney, O., and Pugh, D. (2018). *The NSW Koala Strategy: ineffective, inadequate and expensive. An assessment of the NSW Koala Strategy against Recommendations made in the Independent Review into decline of koalas in NSW*, available at <https://www.wwf.org.au/news/news/2018/nsw-koala-strategy-ineffective-inadequate-and-expensive#gs.c4sN6Ye3>

koala populations and habitat) and Recommendation 5 (legislative reform to biodiversity conservation and land management laws to strengthen protections for koala populations and habitat).

Biodiversity Conservation Act and Regulation

Overview and key concerns

The *Biodiversity Conservation Act 2016* (NSW) (**BC Act**)⁸⁹ sets out protections for native plants and animals, the process for listing threatened species (including the lists themselves), contains criminal offences, allows for licensing of certain activities and provides for the Biodiversity Offsets Scheme to apply to certain developments.

Previous submissions made during the Biodiversity Legislation Review and subsequent legislative process set out our detailed concerns with the policy settings that underpin the BC Act – see **Attachment 1**. Our key concerns, particularly as they relate to koala populations and habitat, are summarised below.

- ***Areas of Outstanding Biodiversity Value have not been utilised*** - As part of the 2016 biodiversity reforms, the NSW Government introduced Areas of Outstanding Biodiversity (AOBV) as a tool for identifying the most valuable sites with irreplaceable biodiversity values outside the national reserve system. AOBVs are intended to be a ‘priority for government investment’ but no new AOBVs have been declared since the BC Act came into effect.⁹⁰ We note that the AOBV mechanism could be used to provide protection for important koala habitat.
- ***Option to list specific populations has been removed*** - The option to list specific populations was repealed and not reintroduced under the BC Act. The ability to recognise distinct local populations is essential for conserving and retaining genetic diversity⁹¹ - a fundamental component of biological diversity. The removal of the option to list local populations is problematic because whilst the overall koala population in NSW is considered to be ‘vulnerable’, some koala populations are in a significantly worse state in particular bioregions. The ability to list specific koala populations with an appropriate threatened species classification is useful for triggering more rigorous protections for more vulnerable or threatened koala populations.⁹²
- ***The Saving Our Species program should be given stronger legislative effect*** - Koalas are one of 6 iconic species identified by the Saving Our Species (SoS) program in NSW. This recognition is appropriate, however the BC Act should give elements of the SoS program,⁹³ including the Iconic Koala Project more meaningful legislative effect. This will help to ensure the NSW Government achieves the SoS aim to ‘secure the

⁸⁹ It repealed and replaced the *Threatened Species Conservation Act 1995*.

⁹⁰ See EDO NSW *Briefing Note Areas of Outstanding Biodiversity Value under the Biodiversity Conservation Act 2016* (2019), available at www.edonsw.org.au/aobv_briefing_note

⁹¹ The recognition that individual populations may constitute biologically distinct taxa is consistent with the concept of Evolutionary Significant Units (ESUs) under the United States of America 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.

⁹² EDO NSW Submission on the draft Biodiversity Conservation Bill 2016, June 2016, available at https://www.edonsw.org.au/nsw_biodiversity_reform_package_2016, p 19

⁹³ As established in Part 4, Division 6 of the *Biodiversity Conservation Act 2016*

koala in the wild in NSW for 100 years.⁹⁴ To do so the BC Act should: impose duties on developers and development decision makers to act consistently with SoS conservation priorities; require environmental assessments to state whether approving the development will contribute to key threatening processes listed under the BC Act, and if so, how this will be minimized, and any alternatives available for the decision-maker to consider; make clear that SoS sites (outside national parks and reserves) are AOBVs; and fund these AOBVs for protection and make them off-limits from harm – including by mining interests (which otherwise continue to override biodiversity protection).

- **The Biodiversity Offsets Scheme is not best-practice** - The new Biodiversity Offsets Scheme (**BOS**) established under the BC Act relaxes ‘like for like’ offsetting requirements and does not contain the ecologically necessary limits to prevent extinctions (‘red lights’). The BOS permits an inappropriate level of variation which may result in a net loss of koalas in NSW. We are particularly concerned that:
 - The BOS does not impose a clear and objective ‘*no net loss or better*’ environmental standard;⁹⁵
 - The BOS can be used without a requirement to *genuinely* avoid and minimise impacts on threatened species.⁹⁶ Offsets should be a measure of last resort and there must be clear guidance provided as to what steps must be taken and evidenced before offsets can be used. Projects that do not demonstrably attempt to avoid or minimise environmental impacts should be rejected.
 - The current offset rules for a threatened species provide a significant degree of flexibility.⁹⁷ The variation rules and ability to pay money to the Biodiversity Conservation Trust (**BCT**) in lieu of actual like for like offsets undermines the integrity of the BOS. Under the variation rules, proponents clearing koala habitat can discharge obligations by offsetting koala populations with any other animal.⁹⁸ And even where koalas are being offset with koalas, there are no location requirements for offsetting ‘species credit’ species. This means that, for example, a local koala population and habitat in Gunnedah could be offset with a different koala population on the south coast of NSW, which is hundreds of kilometres away.
 - The system does not recognize that if like for like offsets are not available, this is a strong indication that the proposal’s impact is significant (and potentially serious or irreversible). That is, there are no effective red lights, and everything is amenable to offsetting despite ecological evidence to the contrary.

- **The concept of ‘serious and irreversible impacts’ should be strengthened** – The concept of ‘serious and irreversible impacts on biodiversity values’ is a mechanism used to assess the severity of impacts on biodiversity that would be caused by a proposed developed or clearing activity, and creates obligations on decision makers once serious and irreversible impacts are identified. The ‘serious and irreversible impacts’ mechanism could be further strengthened to more accurately reflect principles of ecologically sustainable development. For example, the standard should be serious ‘or’ irreversible, not ‘and’; the test should be objective, rather than subjective; references to extinction risk should be clarified to refer to an appropriate scale and scope; and consent

⁹⁴ *Securing the Koala in the wild in NSW for 100 years Saving Our Species Iconic Koala Project 2017–21*, available at www.environment.nsw.gov.au/research-and-publications/publications-search/saving-our-species-iconic-koala-project-2017-to-2021

⁹⁵ The current test is subjective and discretionary: when the Minister establishes the BAM, the Minister is to adopt a standard that, in the opinion of the Minister, will result in no net loss of biodiversity in New South Wales. (BC Act s 6.7(3)(b).

⁹⁶ *Biodiversity Conservation Regulation 2017*, cl 6.2(1).

⁹⁷ *Biodiversity Conservation Regulation 2017*, cl 6.2(1).

⁹⁸ See: BC Regulation cl 6.4(1)(c)(ii)

authorities should be required to have regard the precautionary principle and cumulative impacts on threatened species. Additionally, the requirement to refuse proposals that will have serious or irreversible on biodiversity (as is the case for most development), must also extend to state significant development and infrastructure, not just to local projects. Major projects with significant impacts on koalas should be subject to this requirement.

Recommendations

Recommendation 11: Important koala habitats should be identified and declared as Areas of Outstanding Biodiversity Value.

Recommendation 12: Reform biodiversity laws to strengthen protections for koala populations and habitat, including by:

- a) Re-introducing provisions to list specific koala populations as a separate listing, irrespective of whether a species is already listed;
- b) Giving stronger legislative effect to the Saving Our Species program;
- c) Strengthening the concept of 'serious and irreversible impacts'; and
- d) Extending the requirement to refuse development proposals that will have serious and irreversible impacts on biodiversity to state significant developments and infrastructure.

Recommendation 13: Strengthen the Biodiversity Offsets Scheme, including by:

- a) Imposing a clear and objective 'no net loss or better' environmental standard under the Biodiversity Offsets Scheme and Act;
- b) Ensuring that important koala habitat is not able to be offset (red light)
- c) Requiring genuine attempts to avoid and minimise impacts on threatened species are demonstrated before the Biodiversity Offsets Scheme can be applied;
- d) Requiring like for like offsets, including by removing the ability for proponents to offset impacts on koala populations with any other animal, and by imposing location requirements for 'like for like' offsets of 'species credit' species such as the koala;
- e) Removing the option to discount offset requirements based on non-ecological considerations; and
- f) Significantly reducing flexibility of variation rules and indirect offset options.

Koala SEPP

Overview and key concerns

The Koala SEPP aims to protect koalas and their habitat, but its settings are weak and it is not targeted at the type or scale of projects with highest impact. Importantly, the Koala SEPP defines key concepts: core koala habitat and potential koala habitat. These definitions are referred to by other legislation, including the LLS Act and the BC Act, where they are used as a benchmark for triggering processes and regulation.⁹⁹ This potentially important instrument has long been in need of reform.

⁹⁹ As noted earlier in our submission, for example, for the purpose of the land management regime under Part 5A of the *Local Land Services Act 2013*, category 2-sensitive regulated land (on which clearing is more strictly regulated) is to include 'core koala habitat'.

In December 2010, EDO NSW wrote to the Government on behalf of Friends of the Koala noting, the Koala SEPP 'is in urgent need of reform.'¹⁰⁰

In 2016, the Government announced a review of the Koala SEPP.¹⁰¹ EDO NSW made a submission on the Review of the Koala SEPP outlining our key concerns with the operation of the SEPP and making recommendations for improvement – see **Attachment 1**. Since then the Review of the Koala SEPP has stalled, with no indication from Government as to when or how this review will progress.

A number of our recommendations remain relevant, for example

- ***The aim of the Koala SEPP should be updated*** – An update of the aims of the SEPP is needed to ensure conservation of koalas across their full life-cycle and to insert a reference to the impacts of climate change.
- ***The definitions of koala habitat should be updated*** - Currently, the Koala SEPP is only enlivened if koala habitat is impacted. There are concerns with how the Koala SEPP defines koala habitat and the distinction between 'core koala habitat' and 'potential koala habitat' (see below). As noted earlier, this has implications for a range of NSW laws, including land clearing and forestry laws, which rely on the definition of 'core koala habitat'. The definition of 'koala habitat' should, at a minimum, include any areas where koalas are present, regardless of tree species. The definition of 'potential koala habitat' is limited to the list of 10 eucalypt species. The list of koala tree species should be expanded to reflect established scientific research into koala habitat and behaviour. In 2016, an Explanation of Intended Effect for a proposed amendment to the Koala SEPP identified 65 tree species to reflect updated understanding of koala habitat needs across their full lifecycle.¹⁰² More recently June 2018, the OEH identified 137 tree species used by koalas across NSW.¹⁰³ The definition of 'core' koala habitat is also problematic because it relies on identification of 'breeding females' which is difficult because a visible joey is only a small part of the breeding cycle.
- ***The distinction between 'core' and 'potential' koala habitat should be addressed*** - The distinction between 'core' and 'potential' koala habitat problematic, as it leaves 'potential' habitat unprotected for future recovery (include corridors that may be climate refugia), and may lead to incorrect and inconsistent identification of actual habitat. For council-approved development applications, 'potential' koala habitat receives no protection itself (clause 7). It is only for areas further identified as 'core' habitat that a Koala Plan of Management (**KPOM**) is required. For native vegetation clearing in rural areas, only 'core' koala habitat that is identified in an approved KPOM is excluded from the Native Vegetation Code.¹⁰⁴ This means self-regulated, code-based clearing can occur on actual koala habitat in rural areas. Compounding this is a lack of publicly available information about the types of vegetation and areas cleared which makes it difficult to know if koala habitat is being impacted. For native vegetation clearing in

¹⁰⁰ EDO NSW *Submission on State Environmental Planning Policy No 44 – Koala Habitat*, December 2010, available at [https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/3547/attachments/original/1485908888/Attachment A - 2010 EDONSW SEPP 44 Submission for FOK.pdf?1485908888](https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/3547/attachments/original/1485908888/Attachment_A_-_2010_EDONSW_SEPP_44_Submission_for_FOK.pdf?1485908888)

¹⁰¹ See <https://www.planning.nsw.gov.au/Policy-and-Legislation/State-Environmental-Planning-Policies-Review/Draft-koala-habitat-protection-SEPP>

¹⁰² *Explanation of Intended Effect: State Environmental Planning Policy No 44 – Koala Habitat Protection*, November 2016, available at www.planning.nsw.gov.au/-/media/Files/DPE/Other/explanation-of-intended-effect-state-environmental-planning-policy-no-44-koala-habitat-protection-2016-11.pdf

¹⁰³ Office of Environment and Heritage, *A review of koala tree use across New South Wales*, June 2018, above no 20.

¹⁰⁴ *Local Land Services Regulation 2014* cl 108(2)(b), clause 111 and clause 124.

urban areas and e-zones, 'core' koala habitat may be included in the Biodiversity Values Map,¹⁰⁵ which would trigger assessment and approval by the Native Vegetation Panel. Clearing of actual koala habitat may go un-regulated in urban areas and e-zones (that is, no Council-issued clearing permit will be required) if the proposed activity is *below* the Biodiversity Offsets Scheme Threshold (BOS Threshold) and that native vegetation is not covered by a council's Development Control Plan.¹⁰⁶ There is no obligation to update DCPs to include reference to native vegetation and/or koala habitat.¹⁰⁷

- **Assessment and approval loopholes must be tightened** - Once koala habitat has been identified, we recommend the approval process not allow important koala habitat to be offset, or cleared in exchange for money, in the way that the proposed Biodiversity Assessment Method (**BAM**) does. Rather, to achieve the aims of stemming and reversing koala population decline, assessment and decision-making frameworks must protect in-tact habitat and resident populations (not offset them), and also protect areas to support shifting populations under climate change. All development that has serious or irreversible impacts on koala habitat must be refused (see comments above).
- **Comprehensive Koala Plans of Management (CKPOMs) should be mandatory and more comprehensive** - The uptake of whole of local government area CKPOMs has been slow. There are only 5 plans approved by the Department and a further 9 Councils who have drafted or undertaken koala habitat studies.¹⁰⁸ Local councils responsible for areas in Schedule 1 should be required to develop CKPOMs. We also recommend the SEPP be amended to require that draft CKPOMs be prepared and exhibited within a particular timeframe (e.g. 12 months). This would include making new plans and updating existing CKPOMs to reflect additional tree species. We recommend the Koala SEPP Guidelines be binding to stem habitat loss and support recovery in line with the SEPP and Recovery Plans. That is, planning authorities, developers and surveyors *must comply* with the guidelines. This promotes compliance, public confidence and improves the SEPP's effectiveness. The Guidelines should be included as a Schedule to the SEPP.
- **The 1 hectare requirement should be removed** - This is an arbitrary threshold with no scientific basis for triggering the Koala SEPP and excluding sites below 1 ha leaves small koala habitat areas, particularly koala habitat in urban areas, without adequate protection. The 1 hectare requirement also contributes to cumulative impacts, and can reduce connectivity across the landscape by allowing small patches to be cleared.
- **The Koala SEPP should apply to a wider range of developments and land clearing proposals** - This includes council approved developments under 1 ha; rural land clearing proposals under Part 5A, Division 6 (clearing to be assessed by the Native Vegetation Panel); major projects such as State Significant Development or Infrastructure; complying development; and Part 5 developments.
- **The Koala SEPP must be climate change ready** - The Koala SEPP should be updated to identify and protect habitat and corridors that will support koalas' resilience to more extreme heat and natural disasters, even if there is no koala population in those areas now.

¹⁰⁵ Biodiversity Conservation Regulation 2017 cl 7.3(3)(b).

¹⁰⁶ See the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*.

¹⁰⁷ For more commentary, see https://www.edonsw.org.au/implementation_of_land_clearing_laws_2

¹⁰⁸ See <https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/native-animal-facts/koala/koala-conservation>

- **Monitoring and compliance should be strengthened** - The Koala SEPP should include detailed requirements relating to monitoring, review, reporting and compliance for individual KPOMs within the SEPP. Alternatively, update the Guidelines and include them in the SEPP

Recommendations

Recommendation 14: That the Committee make specific recommendations regarding the finalisation of the review of *State Environmental Planning Policy 44 – Koala Habitat Protection* (SEPP 44), including a timeframe, and recommendations for amendments including that:

- The aims of the SEPP be expanded and include reference to the impacts of climate change
- The definition of 'koala habitat' (including the distinction between 'core' and 'potential' koala habitat) be updated based on expert scientific advice
- The 1 hectare requirement for triggering the Koala SEPP be removed;
- Comprehensive Koala Plans of Management be developed for all relevant local government areas within a particular timeframe;
- The Koala SEPP apply to a wider range of developments and land clearing proposals; and
- Monitoring, reporting, compliance and review of KPOMs be strengthened, with clear guidelines.

ToR (f) - Any other matter

Other laws and policies that impact on koala populations and habitat

In addition to the specific laws and policies discussed above, we note that there are other laws and policies that may also impact on koala populations and habitat and which should be considered by this Inquiry. These include

- planning laws and instruments, and development assessment and approval processes under the *Environmental Planning and Assessment Act 1979* particularly strategic planning and major project assessment
- mining projects under the *Mining Act 1992* and *Petroleum Onshore Act 1991*;
- the rigour of EIA and approval processes for major road projects overseen by Roads and Maritime Services (**RMS**), and other infrastructure projects;
- management of public land under the *Crown Lands Management Act 2016* and the national parks estate under the *National Parks and Wildlife Act 1974*; and,
- assessment of potentially 'significant impacts' on Koala populations under the *Environment Protection & Biodiversity Conservation Act 1999* (Cth), where NSW koalas are also listed as Vulnerable.

EDO would be happy to provide the Committee with further information on these legal processes and their impacts.

Recommendation 15: Undertake a review of all other relevant legislation that impacts on koala conservation, to ensure a whole of government approach is coordinated to prevent the extinction of koalas in NSW.

CONCLUSION

Our submission highlights that there are significant deficiencies in current NSW laws in relation to the protection of koala populations and habitat. Recent initiatives by the Government to address koala conservation have focused mainly on funding and policy initiatives, without the much needed legal reform.

We urge the Committee to recognise that the ongoing concerns of experts and the community have not been addressed by the introduction of the NSW Koala Strategy or the stalled review of the Koala SEPP. Further, major reforms to biodiversity and land management laws and the renewal of RFAs and IFOAs have weakened environment protections, including for koalas, and there are concerns that current proposals to remap old growth and rewrite PNF Codes will do the same.

The strongest legal protection for koalas under current law would be to reserve designated protected areas. National parks currently provide the greatest level of protection against clearing vegetation, including for development, agriculture and forestry activities. In this context we strongly support proposals from koala experts for additions to the National Park Estate that specifically target koala habitat.¹⁰⁹ These ecologically robust proposals are more likely to achieve conservation outcomes than current Government proposals¹¹⁰ and warrant serious consideration by the Committee.

In addition to protected areas for koalas we strongly support incentives for private land conservation, with significant investment going to landholders to manage and protect koala habitat on their properties. Funding management of koala AOBVs would be a critical improvement.

However, as noted throughout this submission, the conservation investments and protections must not be undermined by the impacts of other planning and natural resource management laws. Our recommendations identify a number of overarching areas where urgent law reform is needed, and our detailed submissions listed in **Attachment 1** provide more specific recommendations for amendments to key pieces of legislation, regulations and policies.

Until our laws are strengthened to truly limit or prohibit the destruction of koala habitat – koala populations and their habitat will continue to be at risk and koala numbers will continue to decline in NSW, possibly to the point of local extinction.

¹⁰⁹ See for example, See, for example, Paull, D., Pugh, D., Sweeney, O., Taylor, M., Woosnam, O. and Hawes, W. *Koala habitat conservation plan. An action plan for legislative change and the identification of priority koala habitat necessary to protect and enhance koala habitat and populations in New South Wales and Queensland* (2019), above no 17; see also proposals by the National Parks Association of NSW for Great Koala National Park and Blueprint for koala conservation on the north coast of NSW, available at <https://npansw.org/npa/campaigns/great-koala-national-park/more-information-and-resources/>; see also the Western Woodlands Alliance koala reserve proposal, available at <http://westernwoodlands.weebly.com/>

¹¹⁰ For example, we note that 24,000 hectares of koala reserves announced under the Koala Strategy has been found to contain only 2% high-quality koala habitat and no significant new protection for the species. See Sydney Morning Herald, *NSW chooses timber over koalas, critics of habitat plan claim* 3 June 2018.

Attachment 1: Previous EDO NSW submissions

Forestry - RFAs, Coastal IFOA and others

1. Submission to NRC draft Forestry Monitoring and Improvement Program strategy – July 2019
2. Submission to Private Native Forestry Review – January 2019
3. Submission on the Draft Coastal Integrated Forestry Operations Approval – July 2018
4. Submission to Legislative Council Inquiry into the *Forestry Legislation Amendment Bill 2018* – May 2018
5. Submission to the New South Wales and Commonwealth Governments on their proposal to renew the NSW Regional Forest Agreements (RFAs) – March 2018
6. If a Tree Falls: Compliance failures in the public forests of New South Wales – July 2011

Land Management, Biodiversity Conservation and Koalas

1. Submission on the NSW biodiversity and land management reforms: Draft regulations and products on public exhibition – June 2017
2. Submission on developing a NSW Koala Strategy – March 2017
3. Submission on the Review of the Koala SEPP – January 2017
4. Submission on the draft *Local Land Services Amendment Bill 2016* – June 2016
5. Submission on the draft *Biodiversity Conservation Bill 2016* – June 2016
6. Technical submission on the Biodiversity Assessment Method and Mapping Method – June 2016
7. A legal assessment of NSW biodiversity legislation – September 2014