

**PORTFOLIO COMMITTEE NO. 7 – PLANNING AND ENVIRONMENT
INQUIRY INTO KOALA POPULATIONS AND HABITAT IN NEW SOUTH WALES
Glasshouse Arts Conference and Entertainment Centre, Port Macquarie, Monday 3 February 2020**

**Prepared by Frank Dennis
Port Macquarie – submission 280.**

ANSWERS TO QUESTIONS ON NOTICE

QUESTION 1

The CHAIR: I wanted to ask a question about offsetting. In your opening statement were you referring to offsetting in relation to land clearing?

We have not heard, I do not think, enough evidence before this inquiry of private land clearing.

Did you want to expand a little bit on the threats posed to koala populations on private land and we will get to forestry later?

In fact, I may be asking you if I can take it on notice, rather than try to attempt to give a fairly lengthy explanation now because there are so many different aspects to this.

Threats to Koalas on Private Lands

ANSWER:

Koalas facing extinction in the Port Macquarie Hasting Local Government Area. Any consideration of the habitat requirements of Koalas must include consideration of all forested lands holistically, whether publicly owned or private, if we are to deal effectively with the present crisis/emergency.

Koalas have suffered calamitous crashes in their populations. The first at the beginning of the 20th century when millions of them were killed for their skins. The slow improvement in population numbers reversed in the last 20 years due to habitat destruction and fragmentation due to logging and clearing.

Koala experts had estimated that prior to the fires, koala populations on the north coast had declined by 50% over the last 20 years. With key populations of koalas having been wiped out in the last few months every animal and all its habitat is precious and should be protected from destruction.

Doomed if they do and doomed if they don't

Like humans, most animals have a home range. Koalas are no exception. They have their favourite trees. Some for their flavour, some adjacent to another home range for socialising and some for shelter and rest. The trees koala prefers to shelter in are 30-80 cm diameter breast height over bark DBHOB.

When a fire approaches many animals realise, they can't outrun it, they go to their safest place.

This is why so many owls and gliders perished in the recent fires, because they sheltered in their tree hollows that usually keep them safe, but this time functioned more like a chimney and saw them blasted with heat before being reduced to ash. Koalas took shelter in the bigger trees. They climb to the top and hope they are far enough above the fire and the heat to make it through. Some did, many didn't. Some have been found injured and dazed in the burnt areas, desperately thirsty.

How long before the charred trees produce leaves again for food and shelter? There is nowhere to go that doesn't require a long and dangerous journey overland. So, more die.

Meanwhile those in what is considered less optimal habitat, a sparser population, become even more important to keeping the species from extinction.

It's appalling that we don't have good baseline data for koala populations. The most comprehensive work seems to have been done by NGOs such as the North Coast Environment Council, The North East Forest Alliance, WWF and local environment centres.

Where there is good data, it would seem the fires have burnt up to 90% of koala habitat.

Where there were no large, tall trees left- due to logging, there was nowhere for koalas to shelter and most likely they all perished. Large trees have long been cited by koala experts such as Dr Steve Phillips as vital for koalas - trees 30-80cm. Unfortunately, none of the requirements to leave trees for koalas specify that they need to be in this larger size range.

Logging for saw logs and koalas are competing for the same trees and the koalas haven't been accounted for when estimating timber.

For a few years of timber contracts... that are mostly due to expire in 3-8 years anyway, we are going to send the koala extinct in our region. Contracts have been bought out many times. They need to be bought out now. Keeping the koala and logging was a dubious proposition before the fires, it is now a preposterous one.

There is an urgent need for a koala census, and all habitat of those individuals should be protected.

<https://www.theguardian.com/environment/2020/mar/04/bushfires-likely-to-have-killed-about-5000-koalas-in-nsw-report-finds?>

The fallacy promoted and supported by the State governments environmental legislative framework that you could have endless 'sustainable' logging and never-ending clearing of forests and protect the environment and biodiversity has now been fully exposed by these unprecedented fires due to climate change. Koalas in our region face extinction.

What are we doing for those animals? In State Forests we are logging their habitat. Sending in big machines to remove 90% or so of the trees. Calling it Regenerative Harvesting or Single Tree Selection Medium or Heavy.

The current logging laws and rules affecting all forests West of the Pacific Highway, are likely to be increasingly important in any Koala recovery planning: the Regional Forest Agreements and Coastal Integrated Forest Operations Approvals applying to State Forests in our region together with other planning laws and rules affecting private lands. They have failed to protect koala habitat demonstrated by the serious decline in numbers and now the fires. They must be changed to ensure the survival of the koala.

Our issues with Forestry as it is practiced on Public land are as follows:

Under the old rules:

FCNSW were required to look for koalas prior to logging. Although sometimes these surveys occurred years before the logging began.

They were meant to thoroughly search for Koala scats (faecal pellets) ahead of logging. Where small numbers of scats are found token feed trees (5 of any size per ha) were required to be retained. Where there were abundant scats, they were required to protect small areas around the scats as Koala High Use Areas. Because the Forestry Corporation normally refused to do thorough searches, and because of the minimal protection when found, only some 13 hectares of Koala habitat were protected in any year, and they are allowed to log this next time around. On private land there are few records of Koalas and no need to look before they log, so most Koala habitat is indiscriminately logged.

*Areas of koala presence identified by the Environment Department- known as Areas of Local and Regional Koala Significance (Hubs and ARKS) were completely ignored by FCNSW and logging has occurred throughout many of those areas. Satellite imagery shows that there was absolutely no sensitivity applied.

*After logging, the area is often burnt, just to add to the stress of any koalas that may have survived.

Under the new logging rules:

Against many public objections, the Government went ahead with approving new rules to create an intensive logging zone, allowing clear felling of 143.000 hectares of publicly owned forest from Taree to Grafton in 45- 60 hectare lots (previously only .25 hectares).

The Government has decided to remove the need for the Forestry Corporation to look before they log and are instead protect 10 Koala feed trees per ha over 20cm diameter in modelled high-quality habitat and 5 per ha in medium quality habitat. The EPA recommended that it should be 25 feed trees per ha over 25cm diameter in high quality habitat and 15 trees per hectare in moderate quality habitat. Forty three percent (43%) of the high-quality Koala habitat on State Forests identified by DPI-Forestry is in the North Coast Intensive Logging Zone where clear-felling will be the norm.

Is it any wonder Koalas are too stressed to breed, suffering chlamydia and on the move and vulnerable to dog attack and vehicle strike?

One of the features of the new logging rules under the Coastal Integrated Forestry Operations Approvals, is that a much greater intensity of logging has been licensed. While the term clear-fell is rejected by government, the outcome on the ground is that most of the canopy is removed and the understorey destroyed.

Logging these days is not done by men with chainsaws that have some flexibility about which trees they take. It is done by machine. The harvester grabs, cuts and then holds the tree horizontally to transport it to the log dump for truck collection. For these machines to operate easily they need to clear as they go. They do not weave in and out of the forest selecting a tree here or there. They take many more than they leave.

Under the previous rules, there was a requirement to leave a % of the forest, of the basal area (sum of the cross-section of the trunks). Those rules have gone. Under the previous rules there was a requirement to leave trees small than 20 cm DBHOB, to grow on – such trees are probably up to 20 years old. (Rule of thumb is 1cm DBHOB per year)

Now there is no requirement to leave these trees. Instead there is a ground zero mentality that has been called 're-setting the stand' as if it were a piece of hardware rather than a complex ecological system.

This bare earth logging means that large volumes of small diameter wood is generated. FCNSW and other industry players have identified the growing biomass-electricity market for this wood. The Japanese have been promised- all the wood to meet their biomass needs!

Just as the fires were raging across northern NSW, we heard that FCNSW were poised to sign four new wood contracts for this 'low quality' wood. Because the end purpose of this wood is to be burnt, we suspect it is this market that is driving the current industry push for so-called salvage logging of fire damaged forests.

We gather one contract is to export from Brisbane, another from Newcastle and there are two local buyers. 400,000 + tonnes of wood a year on trucks heading up and down the highway. Taking away our catchment integrity, our natural carbon storage system, and taking away koala habitat. Until there has been a transparent assessment of the fires on koalas and other animals and on the trees themselves, no new wood contracts should be entered into. If these contracts were signed while the fires were raging- in November/December, it is the height of irresponsibility and the minister and the government should be held to account. (Refer to Question 2)

The Deputy Premier stated in Bobbin on Jan 27, that no 'green tree' in a fire affected forest would be taken. But with so little rain, it could be a year before it is clear which trees will succumb to their injuries and which will sprout. Epicormic growth has been much slower than expected.

Besides the push for salvage logging ignores the advice of ecologists that salvage logging is extremely damaging to post-fire regeneration and that the charred trees provide important habitat for small animals and insects. All of which have also had most of their habitat destroyed but which play a key role in maintaining forest health

The intensive logging, coupled with the cumulative impacts of the increased logging of 'old growth' forest areas with big trees, the increases in largely unsupervised private native forest logging, and increasing urban land clearing with its very lax rules favouring development over environmental protection, amounts to a massive assault on our forest estate and Koala habitat.

Protections applying to Private Lands

Urgent action is needed to halt Koala populations from further decline. Study after study has identified habitat loss and fragmentation as major factors in species extinctions, certainly the Koala is no exception. Vegetated and forest areas favoured by Koalas need permanent protection.

Protecting koalas on private land has been a disaster. There is no requirement to look for them prior to logging nor do developers need to survey for them as part of the DA process. The new SEPP fails to prioritise the list of feed trees that koalas prefer so that 10 trees/ha kept can be marginal feed trees or occasional browse trees rather than preferred feed trees.

Neither are they required to be in the preferred size range of 30-80cm diameter. Its biggest failure is to not zone core Koala habitat for protection.

The Koala SEPP has been a disaster because despite being in place for decades now, most LGAs still haven't prepared shire-wide Koala Management Plans. For logging purposes, unless there is a Koala Plan of Management, no action to protect koalas is required. It is more of a Catch 22 than a Koala Protection Mechanism.

It is an indictment of our cavalier attitude to our unique wildlife that there is nothing in the new logging rules that sees Core Koala Habitat defined and protected. A few trees must be kept but not even the ones used by the koalas!

Given the dramatic population decline we have, 'core koala habitat' needs to be carefully assessed. Appropriate zoning and development controls play a critical part in achieving this. Past zoning must be reversed if necessary, to affect this.

State Environmental Planning Policy– (Koala Habitat Protection) 2019

SEPP 44 was recently changed to update definition of 'core Koala habitat' applied to private lands, the number of trees recognised as koala food trees increased, and with improved mapping. However, present indications are that while there has been some improvement around the margins, overall protections offered are still a long way short of being adequate to ensure protection of Koala habitat. Refer to <https://www.edo.org.au/2020/02/20/koalas-nsw-new-laws-old-tricks/>

Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* and amendments to the *Local Land Services Act 2013* commenced on 25 August 2017 to enable biodiversity conservation, sustainable development and productive farming.

The legislation is administered by the Environment, Energy and Science Group within the Department of Planning, Industry and Environment, Local Land Services and the NSW Biodiversity Conservation Trust.

The **biodiversity conservation legislation** establishes a framework for assessing and offsetting **biodiversity** impacts from proposed development.

The **Biodiversity Offsets Scheme** is a framework to avoid, minimise and offset impacts on biodiversity from development and clearing, and to ensure land that is used to offset impacts is secured in-perpetuity.

There are 2 key elements to the Biodiversity Offsets Scheme

Part A. Developers and landholders who undertake development or clearing, generating a credit obligation which must be retired to offset their activity

Part B. Landholders who establish a biodiversity stewardship site on their land, generating credits to sell to developers or landholders who require those credits, to securely offset activities at other sites.

They claim that A **biodiversity** offsets scheme delivers a transparent, consistent, and scientifically based approach to **biodiversity** assessment and offsetting. Is this true?

'**Biodiversity offsets**' policies are increasingly seen as nothing more than 'ideologically' driven constructs, imposed by the Government to allow for the destruction of natural habitat, favouring land developers interests over important environmental protections and other considerations required to maintain biodiversity. They are unscientific and not able to provide the claimed long-term protections they are supposed to offer.

Rebecca Montague Drake, Koala Ecologist and President of Koala Recovery Partnership, giving evidence before an NSW Upper House Enquiry into Koala Populations and Habitat in an opening address to this enquiry said:

"I have consistently seen how multiple pieces of New South Wales legislation permit the legal clearing of koala habitat. But habitat has not just been lost through clearing. In the last year I have seen the once lush forests of the North Coast of New South Wales experience extreme drought-induced dieback, such that now in some areas very little eucalypt canopy remains. In the last year I

have seen more than one third of our koala habitat lost to bushfire, including some of our highest carrying capacity populations.

..... I firmly believe the best thing we can do for koalas is stop clearing their habitat through strong laws that are formed using detailed knowledge of koala ecology and biology.

I believe that immediate moratoriums are needed across multiple pieces of New South Wales legislation to prevent further clearing of koala habitat, particularly in fire-affected regions where so very little habitat remains.....". Ref: Monday, 3 February 2020 Legislative Council Page 2

UNCORRECTED PORTFOLIO COMMITTEE NO. 7 - PLANNING AND ENVIRONMENT

It is clear future management of forests assessed as critical to their survival needs to be consistent with improving the viability and stability of the vegetation cover and other forest dependent flora and fauna. This needs to be supported by rehabilitation programs when necessary and 'buy backs' to improve connectivity, to restore biodiversity on adjoining areas to help achieve long term health of Koala populations dependent on the core areas and linkages.

Each core area should be subject to its own plan, supported with adequate resourcing and expert management regimes: ideally provided by an independent species protection authority specifically established to ensure management over time to achieve conservation aims and outcomes.

The Port Macquarie Biodiversity study 2018 -2030 (page 18) states ".... provides a framework for actions to protect our local biodiversity in the Port Macquarie – Hastings LGA and preserve these values for future for future generations"

It also has a paragraph with an interesting quote. **"As Australia's Biodiversity Conservation Strategy 2010–2030 states, 'business as usual is no longer an option' if ongoing damage to biodiversity is to be prevented.**

Within this context we could say "Business as usual" describes over development and exploitation of natural ecosystems with serious and increasing irreversible impacts on biodiversity, leading to extinction of many plant and animals.

If this is the meaning of "business as usual" then it is easy to say Biodiversity scheme offsets are certainly "no longer an option".

Biodiversity Offsetting does not increase Koala populations already at risk of functional extinction.

Dr Tim Cadman, a Griffith University academic wrote in a recent newspaper article republished in the Port Macquarie News "Biodiversity or eco scam", 23/09/19 that:

"Biodiversity offsets do not work.

- 1. There is no net gain of biodiversity by clearing habitat and 'swapping' it for somewhere else (land clearing is always land clearing)*
- 2. It is not possible to ever replicate 'like for like' (all ecosystems are unique)*
- 3. In Australia and overseas 'offsets' are open to fraud and have been issued against asset types that are not even the same (e.g. forests for wetlands)*
- 4. Biodiversity offsets are the only environmental market mechanisms that incentivise environmental destruction (cf. carbon offsets where there have to be demonstrable emissions reductions)"*

Dr Cadman is particularly worried about the loss of Koala habitat and he described the biodiversity schemes as simply another 'eco-scam'

Ref(original article): <https://www.singletonargus.com.au/story/6396780/biodiversity-offsets-are-they-an-eco-scam/>

With the future of the Koala in our region at stake. On private lands we are being asked to trust their future to Offsets and ecosystem credits?

The Koala is a sentinel species - its health and abundance as a species is an indicator of the health and abundance of the forest on which it depends and ipso facto the health and abundance of many other species that make up a healthy forest ecosystem.

It is not feasible for the objectives and the prescriptions of the Biodiversity Act for the application of so-called compensatory schemes to protect Koalas and the many and varied plants and animals, to be achieved. They imply 'additionality' which is not met. Actions must be based on well-reasoned, scientifically sound natural land management principles with supportive legislation and regulation, with genuine resourcing for long term ongoing survival.

The Commonwealth Environment Protection and Biodiversity Act 1999 is now also under serious question, as well as the Biodiversity Conservation Act. The principles and sentiments expressed in the following quotation are still very pertinent.

There is increasing evidence that the framework established under this legislation is not working to protect biodiversity especially threatened and endangered species.

Dr Bruce Lindsay, a lawyer with Environmental Justice Australia, says

*"part of the issue we've got is the environment laws within the EPBC Act have really become more about facilitating development than protecting threatened species."
"It's about development with conditions. The purpose of the laws is not really about arresting and reversing the decline of threatened species. More than 1,800 plant and animal species and ecological communities (woodlands, forests and wetlands are examples of ecological communities) are currently at risk of extinction, a number that is increasing but which is also likely to be an underestimate of how many are truly vulnerable."*

Ref: <https://www.theguardian.com/environment/2018/feb/13/a-national-disgrace-australias-extinction-crisis-is-unfolding-in-plain-sight>

There are many references in many studies emphasising the importance of habitat preservation in maintaining healthy populations of plants and animals. Claims are made about how well protected they are by legislation, yet biodiversity is declining, in too many instances precipitously.

The hierarchy of Federal, State and local government statutory requirements and administrative planning instruments to protect biodiversity are failing.

Partly because the "ideology" underpinning the planning laws themselves applied to clearing forests is not seriously examined or questioned by the determining authority. The critical capacity elements needed to support the whole compensatory approach of so called 'offsets' is not included or if it is not critically examined as to whether or not it is sound.

In another section of the PORT MACQUARIE - HASTINGS BIODIVERSITY Strategy 2017-2030:

"Port Macquarie-Hastings LGA prides itself in having the largest remaining coastal population of Koalas, and many people view this species as a 'cultural icon' for the area. Cultural or historical ties to forestry, fishing and farming across the LGA ensure that some people feel passionate about, for example, the long-term conservation of ecologically functional forest and marine ecosystems."

While the Port Macquarie-Hastings LGA has numerous national parks and nature reserves with high biological importance, most of these reserves are in areas historically not suitable for housing development, forestry or agriculture, such as swamps and steep ridges.

Thus, while such reserved areas capture some of the biological values of the area, they are not fully comprehensive or representative of the LGA's biodiversity. Land outside the formally protected area network therefore has an important role to play in conserving the full range of biodiversity found within our local government area." (Ref p16 PORT MACQUARIE - HASTINGS BIODIVERSITY STUDY 2017-2030)

'DEATH BY A THOUSAND CUTS'

Within the Port Macquarie Hastings LGA 80% of prime Koala habitat is on private lands (refer P28 PMHC Biodiversity Study 2018 -2030). It is clear whenever significant conflicts over preserving important habitat arise the property owner affected will be given an option to provide an "offset" i.e. an equivalent piece of land considered as suitable habitat – if this cannot be found then the landowner is given an option to make a payment to a Conservation Trust, literally clearing the way for them to destroy any prime habitat on their property likely to affect their the use of the land. Bio certification is another option.

No one with any credible scientific credentials sees compensatory 'offsets' as a viable prescription for managing sensitive important habitat and their dependent threatened species. Significant long-term protection is almost entirely in the hands of the individual landowner/public authority and subject to weak, ineffective regulatory controls, monitoring and accountability. It gets even worse with State Significant Development – Major Projects, where the Planning Minister has discretion to apply or not, regulations and other planning instruments meant to protect environmental values.

Submission made by Environmental Defenders Office NSW to the Upper House 'Enquiry into Koala populations and habitat in New South Wales' - 9 August 2019. provide further support and evidence of the inadequacies of these contentious laws and rules with well researched recommendations. I have included this link to the full EDO document. Ref: <https://www.edo.org.au/publication/inquiry-into-koala-populations-and-habitat-in-nsw/>

The following extract entitled "**Adequacy of protections – Nine overarching deficiencies**" * says the following:

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 Terms of Reference (TORs), we outline nine overarching deficiencies in NSW environment laws that exacerbate the threats to koalas in NSW, including from ongoing habitat loss. *(Ref p12 Submission to the Inquiry into koala populations and habitat in New South Wales Aug 2019)*

Refer to Attachment 1 for more complete listing of the 'overarching deficiencies' in NSW laws.

Climate Change implications

The threat of global heating is another serious consideration. Current legislative protective measures rarely address the impacts of climate change in any systematic way, nor are required to be considered in assessing impacts on wildlife and their habitat requirements. This needs to be addressed by this Enquiry.

There are many adverse climate change impacts from clearing trees, including impacts on water quality and soil erosion. Our standing forests have an important role to play as carbon sinks and they should be allowed to function as such. Native vegetation in NSW stores a significant amount of carbon. Large mature trees sequester considerably more CO₂ than smaller trees. Deforestation and forest degradation will contribute to global greenhouse gas emissions and fewer trees in a region can contribute to drought by reducing the amount of local rainfall.

Global heating is increasingly causing severe droughts, drying out the ground and affecting tree foliage and growth, as well as increasing the severity and intensity of fires, with as yet, not fully understood consequences for koalas.

There are important climatic change impacts on Koala food sources affecting leaf moisture and chemistry that need to be taken seriously. The removal of existing forested areas will be a significant stress on Koalas – Have the various compensatory measures such as ‘offsets’ been examined properly to take account of climatic effects on vegetation? Have they been assessed as suitable with the above effects of Climate Change in mind? It seems likely the existing intact forests are going to be more resilient and more likely provide better prospects for adaptation than any substitute planted or regrown.

It has been estimated that 10% of global anthropogenic emissions in 2010 were accounted for by deforestation and land use changes.

Article 5 of the Paris Climate agreement refers to the importance of forests as the only realistically deployable carbon sinks, stating *“Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases...including forests”* ---

Clearing forests undermines this key Paris Agreement goal, as well as threatening biodiversity and a host of other ecosystem services that forests provide.

Final Comments and Recommendations

The simple fact is there is no good baseline data for Koala populations, one thing is now certain, whatever records existed have been rewritten by the impact of recent bushfires and whatever data does exist the most comprehensive estimates have been provided in the main by NGOs such as North Coast Environment Centre, North east Forest Alliance and others.

There must be a moratorium on clearing Koala habitat. We need a halt until detailed studies and systematic assessment and collation of findings is done. This needs to include new laws and regulations based on knowledge of Koala biology and ecology being implemented. Very little suitable habitat remains.

All areas of forest, especially those left unburned are potentially critical to Koala survival. The forests which have been identified as being occupied and utilised by Koalas in the past 20 years must be protected from logging and clearing, until it is established that Koala habitat needs can be met and given long term protection.

The future of the Koala hangs in the balance. Let's not make a very bad situation worse by repeating past mistakes, by the application of poor, inadequate planning laws and inept land use management planning.

The challenge now is to change, and this requires implementing a 'root and branch' examination of the Biodiversity Act and its application and changes to reflect the science of biodiversity conservation. There is current review of the Commonwealth Environment Protection and Biodiversity Act 1999 also under serious question.

How can you justify clearing yet more prime koalas' habitat especially when you don't know the consequences of doing so?

Eighty Five percent of koalas present before the fires have been killed in our local region. It is vital the science is trusted and not ignored.

It is worth closing this submission considering these extracts taken from PMHC Biodiversity Study (ref Page 14 – 16)

"The Port Macquarie-Hastings Local Government Area (LGA) is a biodiverse area and these biological assets are highly valued by the Council and community. They contribute to the cultural, lifestyle, aesthetic and recreational identity of our LGA. The importance of biodiversity to the local economy (e.g. property values, tourism, agriculture, silviculture, and economic development generally) is also highly valued and recognised.

"Clearly, we live in an area with nationally and internationally important biological values. The identity and economy of the Port Macquarie-Hastings LGA is strongly tied to its rich biological values, with many people attracted to live, work or play in the area because of these values."

Recommendations: (taken from my introductory remarks to the Enquiry restated here as relevant to the question asked)

Declare a global heating emergency and plan responses, accordingly, making protection of the natural environment with ecologically sound, sustainable management principles front and centre to any policy implementation and actions.

1. Moratorium to halt all logging in public native forests.
2. Survey/audit/review (with proper baselines) known sites and locations of koalas with immediate action to protect/reserve all known koala hubs and high conservation value forests areas, across all tenures, known to support/used by koalas core koala habit; similarly prioritise other high risk endangered and threatened species for assessment and protection of their habitat and restoration as required, based on similar surveys and status reviews.
3. Urgent revision of biodiversity, land and vegetation management laws, regulations and practices to implement evidence based regulatory regimes with adequate funding/resources, restoring public institutions to ensure protection of biodiversity, (with reference to EDO and peak environmental groups submissions on this)
4. Change classification of wood biomass as renewable energy source to non – renewable. # Stop promoting or supporting its use here or overseas and withdraw any subsidies. Promote policies supporting 'proforestration' *

5. Contribute to development of ecologically based fire management practices linked to above point.
6. Develop an industry transition plan to provide employment and /or other assistance for displaced timber workers and assistance to others disrupted by the changes required. Employment can be created immediately helping to implement the emergency plan outlined above.

Comments:

***Proforestration** means “growing existing forests intact to their ecological potential”, and is contrasted with **afforestation** (planting new forests) and **reforestation**(replacing forests on deforested or recently harvested lands) that take much longer to remove carbon dioxide from the atmosphere in their early years than older forests do as they continue growing.

Proforestation has the further advantage of not requiring any new land, nor does it have additional labour to plant trees. These older forests also provide multiple benefits including protecting biological diversity and purifying air and water. Ref.

<https://www.gazettenet.com/Guest-column-by-William-R-Moomaw-Bob-Leverett-Robert-A-Jonas-and-Monica-Jakuc-Leverett-27110056>

#Wood based biomass is not the ‘carbon neutral’ energy source industry claims it to be; burning wood is worse than burning coal.

QUESTION 2.

The Committee may choose to put some questions on notice in relation to this to get a bit more information, if you do not have all of it in front of you, Mr Dennis.

The Hon. BEN FRANKLIN: To put a question on notice now, if you have further information or thoughts on this issue to provide that to the Committee, that would be great.

The CHAIR: Where does it come from and where does it go?

ANSWER

Wood Biomass- Where does it come from and where does it go?

There is an expanding worldwide trade in wood pellets to feed furnaces to produce electricity in places such as the UK, Europe and more recently Japan which has some of the biggest wood fired power stations in the world. The USA is a major exporter of wood pellets devastating forest in Southern America. This burgeoning demand has been known to the Forest and Timber products industries in Australia for quite some time. There is an interest in expanding the opportunities to utilise native forest timbers to feed furnaces to produce electricity here in Australia and overseas markets. Also for other wood biomass uses such as producing diesel fuels (Boral Timbers, Herons Creek)

The NSW Department of Primary Industry commissioned a study to examine the wood biomass resource potential of North Coast forests. This report identified a potential for up to one million tonnes per annum of small whole logs could be harvested utilising three hubs to process and possibly produce electricity at Bulahdelah, Kempsey and Grafton.

<https://www.dpi.nsw.gov.au/forestry/north-coast-residues-project>

What is the current situation Re Wood Biomass?

The companies burning biomass on the north coast are resisting Freedom of Information applications about the source and quantity of material they are burning. They say it is all from 'purpose grown plantations'. If this is so, there should be no reason to seek to quash the information.

This industry is increasingly on the nose in Europe and North America because it is a false solution. It doesn't reduce Greenhouse Gas Emissions and it results in carbon sequestration loss through tree destruction as well as ecological devastation.

There are currently four power stations that we know of that burn wood aka biomass. The Condong and Broadwater plants adjacent to the sugar mills of the same name, are owned by the Cape Byron Power Company.

Cape Byron have refused to disclose any detail about the source of their wood and have objected to the release of a GIPA that was put to the EPA about wood sources and wood volumes. They claim on their website that they “wood and plant fibre from purpose grown crops (e.g. plantation forestry)”. <https://www.capebyronpower.com/fuelsources.html>

However much of the plantation wood comes from what were formerly Forest Enterprises Australia, MIS plantations and their claims were that the trees were planted for timber, not for pulp or biomass. As FEA claimed in a submission to the PARLIAMENTARY JOINT COMMITTEE ON CORPORATIONS AND FINANCIAL SERVICES INQUIRY INTO AGRIBUSINESS MANAGED INVESTMENT SCHEMES, 2009 “producing value-added timber products are our highest priority”. They made similar claims in their prospectus. The plantations being cleared for feedstock for Cape Byron Power were not purpose grown.

They also take wood that has come from forest clearing for the Pacific Highway duplication and from the clearing for urban development in SE Qld. In both cases, koala habitat.

Initially these power plants were built, by the NSW Government when it owned Delta Electricity, to burn the sugar cane trash, rather than it being burnt in the field. At the time of the EIS stage, conservationists warned that the cane trash was seasonal, and the power stations would need other wood sources. The response was that they would burn Camphor Laurel, and this would be good for the environment by removing a weed species. The conservationist response was that the Camphor Laurels were spread along creek lines and fence lines and the logistics of removing them would be uneconomic and that the power stations would eventually turn to burning wood from native forests. As it turns out the cane trash is still burnt in the fields and the power stations fuel is predominantly wood.

The Harwood sugar mill/refinery also has a biomass power generator. It is owned by Sunshine Sugar/Manildra which also owns the sugar mills at Condong and Broadwater. The Harwood power generator is only 4.5 MW whereas the power generators at Condong and Broadwater are each 30MW hence their requirement for significant volumes of biomass ie wood.

The other power plant that burns wood is Vale's Point and we are concerned that Federal money that has been earmarked for Liberal Party donor, Trevor St Baker's Vale's Point power station upgrades, may be to facilitate the burning of wood.

While some of the wood for Vale's Point is offcuts from sawmills, there is no transparency around the

source of the wood. We believe it may be from North Coast forests, including koala habitat, via Boral Timbers as stated above, much of the wood currently comes from clearing plantations that were part of various Managed Investment Schemes. These areas are being converted to grazing land, and are therefore not an ongoing, sustainable source of fuel.

Our fears are that wood from public land native forests will then be used as feedstock for these power stations. Significant areas of forests that are home to koalas are at risk.

This fear is based on the Expression of Interest document produced by Forestry Corporation in March 2018 where they sought EOIs for approximately 400,000 tonnes/annum of 'low quality wood' available from the north coast. It is our understanding that contracts for this wood were finalised before the end of 2019.

If they were signed at a time when fires were consuming north coast forests, and had been for at least two months by then, it was a highly irresponsible act, given that the full extent of fire damage to forests and wildlife was still a major unknown.

The wood on offer is the result of the new logging rules that allow for virtual clear-felling across the net harvest area where intensive logging is allowed. Some 142,000 hectares between Grafton And Taree. Significant parts of this intensive logging zone were identified by the Office of Environment and Heritage as Areas of Regional Koala Significance (ARKS).

The intensive logging is required to produce a commodity product of enough volume to balance the books of the Forestry Corporation. It has nothing to do with improving the health of the forests or maintaining biodiversity. In fact, by converting such large areas of forests to a juvenile state, it will make our forests more fire prone, they will produce less water, and provide minimal habitat for our unique wildlife. They will also produce less nectar and less sawlogs.

It is my understanding that the successful tenderers for the wood contracts were for two export companies- one that would use the port of Brisbane and the other the port of Newcastle. There were also two NSW contracts. One based at Raymond Terrace, possibly the Masonite plant? And the other we do not have any information about.

This wood will come from koala habitat.

By the end of October 2019, dozens of injured koalas had been admitted to the Port Macquarie Koala Hospital from nearby fire grounds. In one fire alone, the Crestwood-Lake Cathie fire, hundreds of koalas perished. That makes all forests where koalas persist, even in low numbers extremely important for their survival in the wild.

We ask that the inquiry determine whether the contracts mentioned above were finalised. If they were, the Minister responsible should be answerable for entering into contracts when there were serious doubts about the ability to supply and its impact on threatened species, especially the koala.

If the contracts have not been signed, they must not be signed until there has been an independent and credible assessment done about the extent of fire damage and its implications for all surviving wildlife, particularly the koala.

The Hon. BEN FRANKLIN: To put a question on notice now, if you have further information or thoughts on this issue to provide that to the Committee, that would be great.



North-coast-residues-report.pdf

https://www.dpi.nsw.gov.au/data/assets/pdf_file/0006/747672/North-coast-residues-report.pdf



Threat-Map-Briefing-Are-Forests-the-New-Coal-01.pdf

<https://environmentalpaper.org/wp-content/uploads/2018/11/Threat-Map-Briefing-Are-Forests-the-New-Coal-01.pdf>



The Great Biomass Boondoggle _ by M:

<https://www.nybooks.com/daily/2019/10/14/the-great-biomass-boondoggle/>



Biomass_Factsheet_0719_F_Pgs 15_09_1'

<https://www.southernenvironment.org/news-and-press/news-feed/new-study-shows-burning-wood-from-sustainably-managed-forests-increases-carbon-pollution-for-40-years>



ClimatePolicyBrief7
William R Moomaw.

<http://www.bu.edu/eci/files/2019/06/ClimatePolicyBrief7.pdf>



Timberbiz »
Australia-Japan forest

<https://www.timberbiz.com.au/australia-japan-forest-products-trade-strengthened/>

QUESTION 3.

The Hon. PENNY SHARPE: I am trying to work out what has changed. That is what I am saying. Are they operating under the new rules, which is allowing the increase in intensity as a result of the new rules? You are not sure?

Mr DENNIS: My impression—and there may be others here who might know the answer to that. I can take that on notice.

Are the compartments being logged under the new Coastal IFOA or the old one?

ANSWER

Good question. The Forestry Corporation used to provide both the EPA and stakeholders with a monthly IFOA report in the form of an excel spreadsheet. The sheet was a list of all the currently approved operations, what rules they were operating under, what logging regime was to be applied etc.

This has been replaced by a 'Portal' which has no data summary, seems to be inaccurate and is not contemporaneous. It is not possible, using this site to determine which are the current operations. It is our understanding that there are currently no compartments on the north coast being logged under the rules of the new Coastal IFOA.

There was an amendment to the IFOA in November/December 2019 which allowed for the continuation of logging in areas that were already current operations. Some of those forests where logging is continuing are islands of life in an ocean of desolation. No pre-logging survey work, to determine animal presence post-wildfire, has been conducted.

QUESTION 4

The CHAIR: Are you aware of how much koala habitat in the area has been lost to fires? Have you been able to or has anybody undertaken that work?

Mr DENNIS: No, I cannot tell you that. I do know that Dailan Pugh has done quite a lot of work on that and reports that 90 per cent of what we would consider to be koala habitat—it is only whether he is talking about our area or not. I do not think it would necessarily apply as much here in our locale. It would not be quite as extensive as what it appears to be with the burns further north. Still, it is significant. Certainly, we have got the issue of that burning in Lake Innes Nature Reserve, where that very important koala population was hit so hard by the recent fires.

The Hon. MARK BUTTIGIEG: Just to follow-up on that, is there any rough extrapolation of what that might translate to in terms of percentage of koala population killed in this LGA? Do we have any idea?

The CHAIR: I think the question was whether the groups that you are a part of have an estimate in your—

Mr DENNIS: Can I take that on notice and offer that information to the Committee to give you a better answer?

What % of the LGA koala habitat was burned? What proportion of population might that have been affected?

ANSWER

What % of the Port Macquarie Hastings LGA koala habitat was burned?

The recent bushfires have burnt two and half million hectares of north -east NSW forests (north of the Hunter River), affected 29% of the land area and around half of the native vegetation and its inhabitants.

The following statistical information was provided by the North Coast Environment Council using KHSM and GEEBAM

Port Macquarie LGA (PMQ) 368,074Ha

Koala Habitat, High Quality (KHSM5 classes 4 & 5), in PMQ 117,336Ha

Fire in PMQ (GEEBAM, all) 146,344Ha (40% of LGA)

Fire in PMQ (GEEBAM, canopy fully or partially affected) 61,222Ha (17% of LGA)

Fire in PMQ Koala Habitat, High Quality x GEEBAM, canopy fully or partially affected 15,699Ha (13.4% of HQ Koala Habitat forest canopy affected)

Note that the effect on Koala pops will be greater than this 13%, as they would congregate disproportionately in the higher quality habitat.

Tree cover in PMQ LGA is 283,782Ha, of which some fire was recorded in 52%. Fire affecting the tree canopy occurred in 22% of the total tree cover.

State Forests:

Total SF in PMQ is 74,477Ha, of which 35,704 Ha (48%) had some fire recorded.

17,452Ha (23%) of the SF in PMQ had the canopy partially or fully burned.

5,943Ha of that was HQ Koala Habitat.

So, 39% of the HQ KH that was lost is on SF lands. Note that protection of this is in the immediate gift of NSW Govt to protect.

KHSM

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/koala-habitat-information-base-technical-guide-190534.pdf>

GEEBAM

<https://data.gov.au/dataset/ds-nsw-60fe872a-daf7-49d4-8a54-49ee414aaed2/details?q=>

Private Forests:

Note an estimate of 9000 hectares of private forest was burnt in our Port Macquarie LGA. (Ref **Blayne West, Natural Resources Manager PMHC** 3.30-4.15pm at Port Macquarie hearing 03/02/20)

What proportion of population might that have been affected?

There was a recent report by Steve Phillips, Koala ecologist, on the plight of the Koala. (The Guardian 04_03_20)

"About 5,000 koalas in New South Wales are likely to have died in the bushfires, and their numbers may have dropped by as much as two-thirds in less than 20 years, a new report has found....."

Dr Stephen Philips, principal research scientist and koala ecologist at the environmental consultancy Biolink, which compiled the report, said: "We've taken a conservative approach. But we still think that we have lost two out of every three koalas in NSW. It's a spectacular loss in terms of conservation criteria and meets endangered listing almost immediately"....."

The study looked at declines of koala populations over three generations – about 18 years – and included the effect of the fires from 1 October 2019 to 10 January 2020....."

Areas around Port Macquarie, on the NSW north coast, and the Sydney basin had been particularly hard hit"....."

<https://www.theguardian.com/environment/2020/mar/04/bushfires-likely-to-have-killed-about-5000-koalas-in-nsw-report-finds?>

<https://www.biolink.com.au/projects/reviewing-conservation-status-koalas-across-nsw-qld>

These devastating bushfires decimated Koala populations in our local region. By the end of October 2019, dozens of injured koalas had been admitted to the Port Macquarie Koala Hospital from nearby fire grounds. In one fire alone, the Crestwood-Lake Cathie fire, hundreds of koalas perished. That makes all forests where koalas persist, even in low numbers extremely important for their survival in the wild.

We have been facing an emerging koala and forest emergency for 20 years. Now we've had a bushfire emergency that has severely impacted Koala populations locally with an estimate of 85% percent of Koalas in our local region being killed.

(Ms. FLANAGAN: "In our region, without a doubt, an enormous decline, particularly in the core populations that feed the whole of the region. It could be anywhere up to 85 per cent. (Evidence given by Cheyne Flanagan, CEO Port Macquarie Koala Hospital at Port Macquarie Koala hearing 03/02/20)

ATTACHMENT 1.

Extracts from submission made by Environmental Defenders Office NSW to the Upper House 'Enquiry into Koala populations and habitat in New South Wales' ---- 9 August 2019. *(Ref p12 Submission to the Inquiry into koala populations and habitat in New South Wales Aug 2019)

The EDO submission is very comprehensive and gives well researched recommendations. I have appended the full EDO document to this submission as it is well worth reading in full, including the references provided.

Ref: <https://www.edo.org.au/publication/inquiry-into-koala-populations-and-habitat-in-nsw/>

The following extract entitled **"Adequacy of protections – Nine overarching deficiencies"** * says the following:

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 Terms of Reference (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 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.

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.

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. 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*

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.

**(Ref p12 Submission to the Inquiry into Koala Populations and Habitat in New South Wales, Aug 2019)*