

Submission
No 142

INQUIRY INTO KOALA POPULATIONS AND HABITAT IN NEW SOUTH WALES

Organisation: North Coast Environment Council Inc

Date Received: 2 August 2019



Submission to NSW Koala Inquiry

August, 2019

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Thank you for the opportunity to make a submission on this issue. The North Coast Environment Council is an umbrella organisation for many of the north coast's environment centres and conservation groups. We were formed in 1976 and have for more than 40 years, worked in a voluntary capacity to defend our region's precious places, fauna and flora. We have no central office and are dispersed around the region. We receive no government funding.

We are deeply concerned about the plight of the Koala. It is absolutely vital that this Inquiry leads to a series of protection measures for koalas and koala habitat, or this iconic animal could disappear from the wild.

Currently koala habitat is subject to the death of a thousand cuts. Traditionally koalas have been more numerous on the flatter coastal floodplains and more dispersed in the steeper hinterland forests.

Koalas were once ubiquitous. They were so easy to find that a trade in koala skins reached epic proportions. Millions of koalas were shot for their pelts. As so often the case with commercial exploitation, there was no stopping the killing until laws were passed. "By 1924 Koalas were extinct in South Australia, severely depleted in New South Wales, and estimates for Victoria were as low as 500 animals. At this time, the focus of the fur trade moved north to Queensland. In 1919 the Qld Government announced a six month open season on Koalas, and in that period alone, 1 million Koalas were killed. Although the season officially remained closed until 1927, when the season re-opened, over 800,000 were slaughtered in just over 1 month. Public outrage at the slaughter forced governments in all states to declare the Koala a 'Protected Species' by the late 1930's."¹

Like whales, Koalas have never recovered from this carnage. Their populations remain small with total number of koalas in Australia estimated by the Australian Koala Foundation to be around 80-100,000. That is about 10% of the number killed in just that one month in 1927.

The superficial reasons for declining koala numbers are many and include disease, dog attack and vehicle strike, but all of these are symptomatic of the main causal factor which is loss and fragmentation of habitat.

Many people, including law-makers, have the mistaken view that most animals move randomly through the landscape. This is not the case. Animals have a mental map of the resources they need and they move to each food source or shelter methodically - their home range. Within the home range, koalas have quite specific preferred trees. The size of the home range depends to some extent on the nature and quality of the habitat, particularly food resources. They can be as small as 1 hectare or several tens of hectares. Koala colonies are made up of multiple females, with their home ranges slightly overlapping, where the overlaps occur are where the animals interact. There is a dominant male whose territory overlaps those of all the females. When koalas get to breeding age, they disperse to look for another colony to attach to. Finding other koalas and being part of a group is more important than finding good quality habitat.

This is why protecting extant koalas and the places they live is more important than protecting what to our eye might appear to be good, but often empty habitat. Koalas are social animals, they live in groups, they have favourite trees.

Destruction of part of a home range leaves the animals much as we would feel if our world was tipped upside down- disorientated and stressed. If the fragmentation involves say a road pushed through the habitat, destroying preferred food trees, it could mean that some animals go hungry. It may also mean that animals that previously interacted with neighbours are now isolated or face being injured or killed when crossing the road. Roads also provide ease of access for predators such as dogs. If the density of trees has been reduced, koalas need to spend much more time on the ground, travelling to the trees they use. This makes them vulnerable to attack. The stress from these changes is one of the main causes of chlamydia, which can be fatal.

The Inquiry absolutely needs to understand that koalas must be protected where they live. Destructive activities must be excluded from their home ranges. There must be adequately protected habitat through which they can disperse and reach other colonies.

The NCEC has been involved with attempts to get Koala habitat and koala populations protected over four decades. In that time, we have seen a complete failure of government policy to seriously address the decline in koala numbers.

A number of examples spring to mind:

The first is the interaction between Private Native Forestry (PNF) and the State Environmental Planning Policy, SEPP 44. SEPP 44 was meant to identify high quality koala habitat so it could be protected from development. But councils failed to do the work, many because they did not see it as important and didn't want any mapping that might constrain development. Coffs Harbour City Council did do a Comprehensive Koala Plan of Management, and it identified significant areas of privately held forest that had high quality koala habitat.

The NSW Government refused to accept the CHCC KPOM because private logging interests objected. Instead Councils were excluded from having any decision making role in private native forestry (PNF), making the CHCC plan ineffective.

The PNF Code does not require the identification of high quality koala habitat on the PNF Property Vegetation Plans, and does not require any kind of koala search or survey prior to logging. The NSW Government has put significant resources towards encouraging landholders into PNF. Once plans are approved they have a 15 year life span and operate under the regulations that were in place when the approval was given.

In our 2012 Submission to the PNF Review, we made the following comments with respect to koalas. Most of which is relevant to this Inquiry because the situation for koalas with respect to PNF has only worsened:

“The prescription for the koala [in the PNF Code] was meaningless given the number of SEPP 44 Koalas Plans of Management in existence, the suggestions in the discussion document fail to address the key problems.

The PNF Code of Practice has particularly failed the koala.

The PNF CoP for Northern NSW states that *“Forest operations are not permitted within any area identified as ‘core koala habitat’ within the meaning of State Environmental Planning*

Policy No. 44 – Koala Habitat Protection”. Despite SEPP 44 being in existence for almost 20 years there are still only three LGAs that have KPoMs under the SEPP. This has meant that NO koala habitat has been protected in logging operations despite them occurring in areas known to be high quality habitat.

Coffs Harbour LGA was keen to ensure that their koala populations were protected and they worked collaboratively with the NSW Environment Department (then NPWS) to get their Koala Plan of Management approved in 1999. Coffs Harbour is a stronghold for the koala, and much of the remaining forest in the LGA is 'core koala habitat' as defined by the SEPP. In fact the Coffs Harbour KPoM, makes a clear reference to the fact that 'core koala habitat' constitutes all three habitat categories delineated on the Koala Habitat Planning map. It states that:

“The Koala Habitat Planning Map forms the basis for the identification of areas of core koala habitat meriting protection through the planning provisions of the Coffs Harbour City Council Local Environmental Plan (LEP) 1999. Clause 12 of LEP 2000 requires that the consent authority shall not grant consent to any development on lands mapped as Primary, Secondary or Tertiary Koala Habitat or on lands adjoining Primary Koala Habitat unless the development is in accordance with this KPoM”.

However, in 2010 it became clear that DECCW had issued 60 PNF PVPs over core koala habitat as delineated on the Koala Habitat Planning Map in the Coffs Harbour Koala Plan of Management. Those PVPs cover approximately 1,890 hectares of mapped core koala habitat.

Since then the Environment Department, in all its various iterations, has steadfastly refused to accept the definition of core koala habitat in the KPoM. Logging has been allowed to continue in areas where there are known koala populations and the Department has not only done nothing about it, it has sanctioned it, encouraged it and played hard ball with Coffs Harbour City Council. The suggestion for example, that koala records in the CHCC KPoM don't count because they are not contemporaneous is absolutely outrageous. This from a mob who refuse to recommend contemporaneous looking for anything!

Now the Department has produced a discussion paper to “generate input from the community on how to identify and protect important koala habitat under the PNF Code of Practice.”

We suggest that the Department would be well advised to go and read the NSW Koala Recovery Plan. We include some salient quotes here:

“As more information is gathered, it is clear that the definitions of koala habitat in SEPP 44... are not able to identify all habitat of importance to koalas. Currently, the list of koala food trees in Schedule 2 which are used to identify potential koala habitat comprises only 10 species. Given the considerably greater variety of food tree species used by koalas across the state, the current Schedule 2 does not list all of the koala food trees which are important for the survival of koalas throughout NSW. Consequently, habitat of importance to koalas will not always be identified and adequate protection and management of koala habitat does not always occur.”

Koala populations on the NSW North Coast are scattered, of medium density and predominantly occupy secondary (class A) habitat.

Similarly, other studies in north- eastern NSW (Phillips 1994; Callaghan and Phillips 1998)

have established home ranges for individual koalas of 13–15 ha. Studies in Port Stephens have established home ranges of 0.2– 500 ha, with an average of 80–90 ha (D. Lunney, NPWS, pers. comm.).

Smith and Andrews (1997) found that koala activity was greater in structurally diverse forest with the majority of trees 50–80 cm diameter at breast height (dbh). White (1999) found that koalas preferentially utilise trees between 25.5–80 cm dbh, with under-utilisation of trees less than 25.5 cm dbh. Lunney et al. (2000a) found that the koalas in the Coffs Harbour area favoured trees of 50–60 cm dbh and greater than 120 cm dbh.

Areas which support koala habitat but do not currently support koalas are important for the future recovery of the species by providing habitat into which recovering populations can disperse. Furthermore, native vegetation which does not necessarily support koala food trees but which forms a buffer between primary or secondary habitat and urban and/or rural development (to reduce edge effects), a corridor or link between areas of primary or secondary habitat (see Scotts and Drielsma 2003), or a refuge from fire, should be categorised as tertiary koala habitat. Such habitat may not provide important foraging resources and therefore may not necessarily support resident koala populations, but may still provide resources important to the survival of koala populations.

Monitoring of the effectiveness of the PNF codes of practice and specifically the prescriptions to protect koalas and their habitat, needs to be undertaken...

Performance criteria of Recovery Plan

Criteria to indicate that the health and viability of koala populations in NSW is improving will be:

- maintenance of existing populations (i.e. no local extinctions)*
- improvement of the extent and quality of habitat and protection of priority habitats and sites*
- an increase in the numbers of breeding females, together with a corresponding decrease in records of juvenile mortality*
- an increase in the general health of animals in the wild (e.g. less overt signs of Chlamydia infection or other illness)*
- an expansion in distribution and the presence of koalas in all areas of primary koala habitat*
- an increase in community reports of koala sightings.*

And finally Action 1.8 from the Koala Recovery Plan is “DECC will identify important koala populations in NSW for active management, monitoring and conservation.”

It is important to remember that logging is a primary threat to koalas. It destroys, fragments and degrades koala habitat, it removes canopy connection forcing the animals to the ground in order to move from tree to tree, making them vulnerable to dog attack, attacks by cattle, and vehicle strike. Logging debris increases fuel load that contribute to dangerous fires, another major threat to koalas, and it is well established that physical disturbance and habitat loss through logging, causes stress that leads to deadly diseases such as chlamydia.”

Transparency around PNF is non-existent. Since responsibility has been transferred to Local Land Services LLS, the PNF Register is no longer online. The last figures we had suggest there could be a million ha of forest approved on the north coast alone. Without a public register it's not possible to assess the scale of the issue. **The PNF Public Register should be reinstated.**

One anecdote of a PNF property known to have breeding koalas with female and joey and young koalas witnessed by many, underscores the frustration with the lack of regulation to date. A quick site assessment found a koala high use tree had been removed. It had dozens of koala scats around it. As we found the scats we laid them on the stump. A complaint was made to the EPA. Their investigation finding was that as we had moved the scats they couldn't be sure they had come from around that tree. Catch 22.

The abject failure of Government to protect koalas on private land makes it much more important that it act to protect koalas on public land.

To date, this too has been a failure. FCNSW have consistently failed to find evidence of koalas, when others have no difficulty. This has been well documented in the audits done by the North East Forest Alliance. The experience is repeated up and down the north coast.

But even in areas where the Government's own scientists (office of Environment and Heritage) have identified areas of local and regional significance for koalas, these areas have still been logged.

It was shocking to see the damage done to the Koala Hubs in Wang Wauk State Forest. The mapping of 'Koala Hubs' or Areas of Local Koala Significance, and Areas of Regional Koala Significance (ARKS), was obtained by the National Parks Association (NPA) via Freedom of Information requests, in May 2018.

In the documents obtained, the Office of Environment and Heritage described the Koala Hubs thus:

The intent of these spatially defined areas is primarily to delineate highly significant local scale areas of koala occupancy currently known for protection. ...

These areas are not designed to be an exhaustive account of all koala presence across NSW, but rather define areas of currently known significant koala occupancy that indicate clusters of resident populations known as Koala Hubs.

At that time, the NPA said “ Hubs and ARKS offer a strong basis upon which to identify priority areas for protection of koala populations” and recommended that “The NSW government must place all koala hubs on state forests, along with buffers of a minimum of 1km, under a moratorium from logging until further assessments are undertaken to identify boundaries of koala usage and determine meaningful and climate-resilient koala reserves. Given the importance of riparian vegetation in maintaining koala populations during droughts the government must rethink its intention to reduce headwater stream buffers via the new logging laws.”

The NPA noted that there was a particular concentration of hubs in Wang Wauk State Forest, north of Buladelah on the mid-north coast.

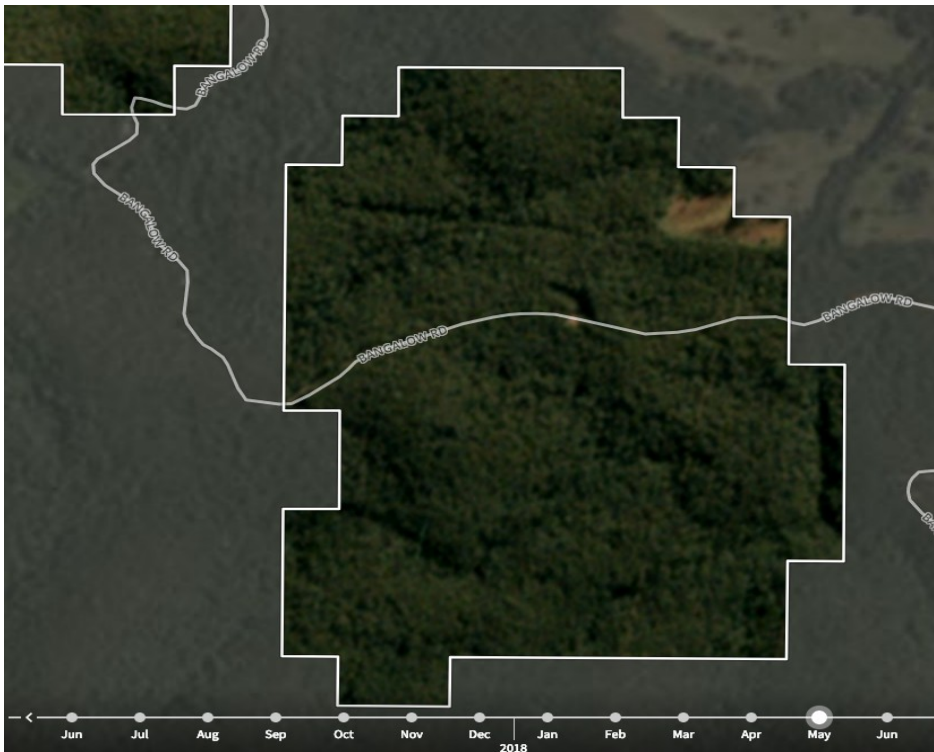
Satellite imagery of logging in Wang Wauk State Forest is depressing.

By overlaying the koala hubs map on the satellite image, it is possible to see the extent of clearing on a koala hub in the last year.

This is happening right across northern NSW forests. Despite these areas of known koala occupancy being identified, and despite Koala population numbers in dramatic decline, these hotspots of koala activity are being logged.

This first image below is from May 2018. The white-outlined area is a Koala Hub in Wang Wauk

State Forest.



This second, is the same area in December 2018.



There needs to be an immediate moratorium on the logging of all the identified Koala Hubs along with a protective buffer of 1km around them.

Anything else will result in the steady decline of wild Koala populations as they head towards extinction.

[Click here to see the Before and After images of Wang Wauk logging](#)

[Click here to see images of the destruction in progress.](#)

All images courtesy of Planet.com

The NEFA report Forest Logging of Koala Hubs can be obtained [here](#), and documents that this is not an isolated incident and it happening right across the region.

In response to ongoing bad publicity about the plight of the Koala. The NSW government announced a series of koala reserves, most of which were nowhere near a Koala Hub and several had no records of koalas. There was much fanfare about the Koala Strategy. Spin over substance does nothing to save koalas. They will likely be extinct in the wild well before 2050. The table below shows the sad truth about the Government's 2018 so-called Koala 'Reserves'. 83% was already off-limits to logging and only ONE had a genuine concentration of koala records.

Koala "Reserves"	Area we Digitized (ha)	Area OEH (ha)	Proposed Tenure	Already Protected in Informal Reserve (FMZ 1, 2, 3A, 3B)		Koala_highest quality habitat		Koala records
				ha	%	ha	%	
Barrington Tops	156	155	Flora Reserve	149	96	0	0	0
Carrai	2111	2103	National Park	2102	100	0	0	0
Comleroy	2911	2905	Flora Reserve	2909	100	0	0	0
Corrabare	843	843	Flora Reserve	841	98	0	0	1
Mt Lindesay	5596	6195	Flora Reserve	1988	36	244	4	49
Mount Boss	1381	1383	SCA	1381	100	273	20	2
Oakes	593	593	National Park	592	100	37	6	1
Watagan-Olney	3120	3107	Flora Reserve		99	0	0	9
Jellore SF	1415	1415	Flora Reserve	1415	100	NA	NA	3
Belanglo SF	1805	1818	Flora Reserve	1253	69	NA	NA	68*
Meryla SF	4084	4084	Flora Reserve	4084	100	NA	NA	0
TOTALS	24015	24601		19802	82	554	2	133*

NOTE That the areas given are from manually digitising maps which resulted in some minor deviations from NPWS's claimed areas, except for Mt Lindesay and Corrabare which both appear to be NPWS errors.

* Nearly all of the Koala records in Belanglo come from radio-tracking just 2 individuals.

It is particularly disturbing that these 'reserves', 83% of which were already off limits to logging, are being used as the rationalisation for opening up protected old forests for logging. With the industry saying it is 'evening up the ledger' after areas were taken out of production as part of the koala strategy. This is totally dishonest. The Koala 'Reserves' were largely chosen to ensure there was NO impact on timber volumes.

One of the most disturbing elements of the new Coastal Integrated Forestry Operations Approvals is the legitimisation of a form of intensive logging, which to all intents and purposes is clear-felling. The Chief Scientist in her report on Koalas, recommended that research be done to determine whether this form of intensive logging, is harmful to koalas.

We think this is somewhat akin to scientific whaling. There is abundant research on the impacts of disturbance on koalas. The logging proposed is intensive disturbance. It has taken years, from the time the research was recommended, to put a 'trial' in place. Meanwhile the logging continues. Worse though is that resource and timber contracts are being given out based on wood volumes that can only be obtained via this intensive logging. That is, the 'small log' wood contracts for around 400,000 tonnes that have been identified by FCNSW and DPI as available for biomass burning for

electricity generation either in Australia or overseas.

When the research project does show that koalas are highly sensitive to having their home-ranges destroyed [and should the research show otherwise, it will have been rigged] then once again the taxpayers of NSW will be liable to pay out contracts for volumes of wood that can't be met OR the contracts will be met and more Koalas will die.

Finally there is the issue of Climate Change which we know is heating the planet. Temperatures throughout the summers are likely to rise, initially into the 40s, but how high will they go? While some governments claim to accept the climate science, the few policy initiatives don't apply to areas other than energy. When it comes to the impact on animals and plants there is a deafening silence.

[A paper released last week](#) shows that on current trends, many animals will find more than 50% of their range no longer suitable for habitation. This could well be true of koalas. They may find the coastal lowlands too hot and migrate towards the cooler, but much steeper terrain of the Great Dividing Range. We don't know whether the changing climate will affect the concentration of nutrients in the eucalyptus species favoured by koalas. But what is highly likely is that climatic change will greatly increase the stressed on koala populations and they will need even more help to persist in the wild.

Only strong recommendations from this committee to protect koalas and their habitat is likely to stop that.

The NCEC endorses the recommendations of the Stand Up For Nature Alliance submission and we also support the submission of the North East Forest Alliance. An additional recommendation is that the PNF Register be reinstated and kept up to date.

¹ <https://www.savethekoala.com/about-koalas/history-koalas>