INQUIRY INTO KOALA POPULATIONS AND HABITAT IN NEW SOUTH WALES

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Ashley Love, email;

2nd August 2019

Submission to the Inquiry into koala populations and habitat in NSW

Dear Committee,

Please accept this submission from the Bellingen Environment centre (BEC) to the Inquiry into Koala Populations and Habitats. We are confident that with its terms of reference and strong community support the Inquiry identify to the NSW Government a model that that will see koala declines reversed before it is too late.

Extinction of koalas in NSW is possible or even likely within the next 50 years if we do not urgently change course.

We know the problems and this doesn't have to be the inevitable fate for koalas as we also know the solutions.

Your Committee has an opportunity to influence the Government to choose a future which saves the koala and provides a range of positive social, economic and environmental outcomes.

Members of the BEC have participated in an ongoing series of koala conservation campaigns over the serious decline in koala numbers on the Mid North Coast over the last 40 years. Recent involvement includes in Pine Creek, Gladstone, Scotchman and Roses Creek State Forests and at Lot 2 Sawtell.

Members of the BEC participated with other local conservation groups and the NSW National Parks Association in initiating the koala habitat studies in 2012 on the Mid North Coast that led to the development of the proposal for the establishment of the Great Koala National Park which includes all the native forests in state forests in Bellingen Shire .

The Great Koala National Park will give our dwindling koala population the habitat they need to thrive again. By adding 175,000ha of state forests to existing protected areas to form a 315,000ha reserve in the Coffs Harbour, Bellingen and Macksville hinterland. Currently most koalas in NSW live outside of protected areas. In fact, because our National Park network is biased towards higher, more infertile country, it doesn't capture well the habitat that koalas prefer – fertile, coastal forests that produce more nutritious leaves.

Analysis of OEH conducted research into where koalas are located (called 'koala hubs') has showed that the Great Koala National Park contains 44% of all hubs in state forests in NSW. We are confident that the Government data supports our view that the Great Koala National Park is the most important area of public land in NSW for koalas.

The BEC believes strongly that the implementation of the Great Koala National Park, if properly supported, will provide considerable social, economic and environmental benefits to the local and regional communities. It can potentially provide a major ecotourism attraction for local, regional, state, national and international tourists.

The BEC has also participated with Bellingen Shire Council in successful development of the Koala plan management for Bellingen floodplain despite the limitations of SEPP 44 and the unhelpful policy positions of participating state government agencies.

The submission seeks to address the majority of the TOR's but with an emphasis on depth information for the proposed Great Koala National Park

The BEC requests an opportunity to appear before your Committee and to accompany you on a field trip to key sites within the proposed Great Koala National Park.

Sincerely,

Ashley Love Committee member Bellingen Environment Centre



ABN 12 164 311 446 • Shop 4/1 Church St Lane BELLINGEN • PO Box 461 PO BELLINGEN NSW 2454

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Terms of reference (TOR)

The overarching TOR requires the Committee to;

"...Inquire and report on actions, policies and funding by government to ensure healthy, sustainable koala populations and habitat in New South Wales,"

The submission by the Coffs Coast Branch of the National Parks Association analyses the overarching TOR's and we agree with the outcomes of that analysis leading to the following model for koala conservation:

1. A comprehensive, adequate , representative and reserve system for koalas (throughout their range as far as is practicably possible)

- establishment of a the Great Koala National Park
- establishment of a network of koala national parks as identified by the NPA 50 new parks and other NPA reserve proposals
- identification and protection of other koala climate refugia as a matter of urgency.
- an end to industrialised logging on public land that destroys habitat quality for koalas

2. A commitment to appropriately manage and as necessary restore the koala reserve system

- an adequate resourcing and staffing model for park management
- a just transition for affected timber workers
- joint management or Aboriginal ownership and leaseback of koala reserves

3. Promotion of the highest level of recognition of koala reserves.

 assessment and nomination of the 'best of the best' of koala reserves for World Heritage listing potentially in association with other forest criteria assessment and nomination

4. Promotion of appreciation of koalas and koala reserves.

- Implementation of World class education and ecotourism programs

5. A Commitment to a network of connectivity between reserves.

- Protection of 'koala hubs' (areas identified by the Office of Environment and Heritage as particularly important for koalas) immediately on all land tenures
- independent identification and confirmation of the requirements for connectivity
- establishment and ongoing support for local koala committees to address local management issues
- strengthening of SEPP 44 (koala habitat protection) to ensure koala habitat is not destroyed by urban development, dogs and vehicles ,
- protection of known koala habitat from land clearing by identifying it as Category 2-sensitive land or Areas of Outstanding Biodiversity Value, and
- urgent requirement for local governments to complete the mapping of koala habitat for holistic protection.

6. A commitment to reduce threats to koalas across their range.

- initiation of a state, regional and local approach to threat mitigation
- ensuring Private Native Forestry is genuinely low-impact and selective.

7. A koala welfare system with adequate government support.

- develop and implement in consultation with carers groups a model for support.
- 8. A research program for habitat ,disease, monitoring and management.
 - Development, in consultation with all stakeholders, of a model for research and monitoring and timely delivery of outcomes.
- 9. A Commitment to a koala population management based and scientifically supported and participatory approach to manage koala populations across all tenures.

Whilst providing the above model for achieving the Inquiries task we have addressed key components of the TOR's separately in the following sections of this submission.

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

Trends -. The BEC has undertaken targeted campaigns toward koala conservation on the North Coast for almost fifty years and there is considerable evidence that points to almost all koala populations on the Mid- north coast being in decline.

We are gravely concerned that koala populations on the North Coast have crashed by 50% over the past 20 years, and that the increase in land clearing and reduction in logging rules will likely see them made extinct in the wild within the next 30 years. Koala populations have crashed by 50% because they generally prefer the more productive forests left on the coastal floodplains and foothills, the forests that have been most targeted for clearing, logging and urbanisation. If koalas are to be given a chance it is essential that all remaining colonies be identified and fully protected.

BEC's ongoing discussions with local koala experts and carers on the NSW Mid-north coast in the course of conducting our campaigns and developing the reserve proposal for the proposed Great Koala National Park corroborates this evidence.

Both formal and informal surveys and together with anecdotal evidence suggesting that koalas are disappearing from many areas. A pleasing exception to this trend has been the recent identification by BEC citizen scientists of a healthy koala colony in Roses Creek State Forest in the headwaters of the Kalang River where the Forestry Corporations pre logging surveys had located only one record.

The key issue of concern to the BEC in adequacy of protection is the poor alignment between koala habitat and the reserve network, and it is this issue that our reserve proposals seek to address. Of the 77,517 hectares (ha) of 'koala hubs' (areas inhabited over time by koalas and therefore of particular importance) identified by the Office of Environment and Heritage in north-east NSW, only 14% are located in national parks. In contrast, 20% (15,552ha) are found in state forests and 66% (51,463ha) on private land. WWF's Koala Habitat Conservation Plan identifies that, across the entire state of NSW, 67% of koala records are from private land, 14% in national parks, 8% in state forests and 11% on Crown Land. These statistics highlight the historic reserve bias away from more productive lands preferred for logging and agriculture. The National Park estate is heavily biased towards steep, infertile lands and away from the more fertile coastal lowlands, particularly in northern NSW, where threats to koalas are greatest (Pressey et al. 1996, Pressey et al. 2002). Because koalas prefer more fertile forests on the coastal lowlands (Lunney et al. 2016), in turn because they select feed trees with greater nitrogen content in the leaves (Moore and Foley 2005), this reserve bias is, in effect, a bias away from high quality koala habitat. This bias must be overcome if koala declines are to be reversed.

The poor alignment of koala reserves is clearly demonstrated by the recent State Government announcement of 12 new Koala reserves A review of the proposed Koala reserves which underpin their Koala Strategy identifies:

- Ten are already protected as part of the informal reserve system (as FMZs 2 and 3)
- Only 3 have high quality Koala habitat as modelled by DPI-Forestry identified within them, and 2 of these have no recent records to substantiate the models.
- Four have no records of Koalas, and only 2 have records within the past 10 years.

• Four are totally outside the OEH's Areas of Regional Koala Significance (ARKS) and two are mostly outside ARKS.

• Only 3 contain Koala Hubs, totalling just 181 ha (0.9%) of the Koala Hubs on State Forests.

• Only 3 can in part be justified to contain high quality Koala habitat, and these exclude adjacent areas of high quality habitat.

It is clearly evident that there was no credible process undertaken to identify the Koala Reserves and that OEH's ARCS and Koala Hubs, along with DPI's modelled Koala habitat and Koala records, were ignored in the Government's selection of reserves. They were obviously, steep uneconomic or badly disease affected forest lands.

Conversely, the proposed Great Koala National Park encompasses 8,697 ha (44%) of NSW's Koala Hubs on State Forests in 2 ARKS. The OEH data strongly supports its exceptional importance for Koala conservation in NSW.

The Oaks National Park proposal is the only one of the Government's proposals which lies within the proposed Great Koala National Park and it lies at the western extremity of the proposal . The Oaks National Park proposal is **already** part of the informal reserve system, Only 6% of the proposal is high quality koala habitat. it has no koala records in the last 10 years.

Areas in the western extremity of the proposed Great Koala National Park were included partly in consideration of potential future habitat in response to climate change. These areas at least partly fall outside OEH koala Hubs which could be because they have been subject to little koala survey effort.

As mentioned earlier in this submission the recent identification by BEC citizen scientists of a healthy koala colony in Roses Creek State Forest in a similar environment in the headwaters of the Kalang River indicates these forests have been underrated as koala

habitat. That the Forestry Corporations pre logging surveys had located only one record confirms the underestimation of these poorly surveyed extremities to rated habitats .

Key threats -Within a given area koalas will firstly select feed trees based on species, and secondarily on size, preferring trees over 30cm diameter, with use increasing in line with tree size. They also utilise understory trees for shelter on hot or windy days. In good habitat they have stable home ranges, with a male overlapping a number of females. Logging is targeting the mature trees preferred by koalas for feeding, with less feed trees there are less koalas and social systems can break down.

For the past 20 years the Forestry Corporation 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 these 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.

The Government has decided to remove the need for the Forestry Corporation to look before they log and are instead to protect 10 Koala feed trees per ha over 20cm diameter in modelled high quality habitat and 5 per ha is 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. The NRC over-rode the EPA to support the Forestry Corporation.

The 2018 OEH submission to the IFOA laments that there will ;

"...be a reduction in protections offered to koalas",

with koala feed tree retention rates

"...less than half those originally proposed by the Expert Fauna Panel".

It is outrageous that 43% of the high quality Koala habitat on State Forests identified by DPI-Forestry is in the North Coast Intensive Logging Zone where clearfelling will be the norm.

It is evident that the Forestry Corporation cannot be trusted to provide the required protection for core koala habitat and have instead been routinely logging it.

Resource availability

A key commitment of the NSW Government has been that the new Integrated Forestry Operations Approval (IFOA), will result in "no net change to wood supply and no erosion of environmental values".

This issue is quite complex and the analysis has been led by the North East Forest Alliance and much of what is written in this section has been sourced from reports available on the NEFA website. Unfortunately there were numerous reductions in environmental constraints that were agreed between the agencies, or imposed by the Natural Resources Commission (NRC) at the behest of the Forestry Corporation, in negotiating the new IFOA on the basis of the need to maintain current timber yields for the next 100 years.

Even then the Natural Resources Commission (NRC) in 2016 claimed that "it is not possible to meet the Government's commitments around both environmental values and wood supply", maintaining there would be a shortfall in commitments from north-east NSW of 7,600 to 8,600 m3 /yr of High Quality Logs (HQL) due to protections for Endangered Ecological Communities and koalas.

To make up this claimed shortfall the Government decided to log oldg rowth forests and rainforest protected in the reserve system. The shock NRC decision was apparently based on their assessment of ~180,000 m3 /pa harvest volume (avg over 100 years) **supplied from the native forest estate only**", noting: 180,000m3 /yr is the average annual HQ supply estimated to be available when modelling native forest growth over a 100 year planning timeframe (from the model where Threatened Ecological Communities (TEC) mapped areas are excluded from net harvestable area).

Wood Supply Agreement (WSA) commitments of HQL are based on yields from both native forests and hardwood plantations. The decision to establish over 10,000 ha of new hardwood plantations North East Forest Alliance as an outcome of the RFA was specifically to increase the supply of HQL in the long-term.

It is thus perplexing as to why the NRC excluded plantation sawlogs in their assessment. By doing so they turned an identified average yield of 237,000 m3 /yr of HQL over the next 100 years, a surplus of 10,000 - 20,000 m3 /yr (depending on whether small poles are included) above current WSAs, into a claimed potential shortfall in commitments from north-east NSW of 7,600 to 8,600 m3 /yr of HQL

With plantations included there is no shortfall in HQL resources and thus no need to log protected HCV old growth or rainforest . In fact you could increase protection for Koala habitat and other important areas.

The decision to exclude plantations by the NRC should be thoroughly examined by the Inquiry or referred for independent review before this process proceeds any further.

Adequacy of protection

The Office of Environment and Heritage (OEH) has as a Koala *Save our Species* project been involved in developing data on Koala habitat with the aim of implementing recommendations of the Independent Review into the Decline of Koala Populations in Key Areas of NSW (NSW Chief Scientist and Engineer 2016), specifically:

• Identify key koala populations and management areas which have the potential for long term recovery and viability

• Identify priority threats to key koala populations at the population scale

• That government agencies identify priority areas of land across tenures to target for koala conservation management and threat mitigation."

This, and associated reports and data, were released to the National Parks Association under a Government Information (Public Access) request. **The Inquiry should ask for access to this data if not provided by the Department**

The outcomes of the OEH assessments are compared below to the NSW Government's Koala Reserves and the NPA's proposed Great Koala National Park.

OEH has applied the available data to identify and map 48 Areas of Regional Koala Significance (ARKS) and the distribution of habitat and threats within each of them. This has been supplemented by analyses of Koala records to "define areas of currently known significant koala occupancy that indicate clusters of resident populations known as Koala Hubs". These are the priority areas identified for protection.

As identified by Rennison and Fisher (2018): The fickle nature of koala distribution patterns in NSW highlights the importance of investing significant effort to identify lands currently occupied by koalas, and to focus on the protection of koalas where they reside, rather than protecting habitat as a surrogate for koala occupancy.

Most significantly OEH have utilised available koala records to identify 19,755 ha of Koala Hubs on State Forests "currently known for protection". While not exhaustive, on the basis of available data, these are known to be the most important areas for koala protection and should be immediately placed under a moratorium, along with a kilometre buffer, until they are more fully investigated and the needed meaningful koala reserves established.

A review of the Koala Hubs identifies: that of the total 101,821 ha of Koala Hubs identified in NSW,

65% occur on private lands,

19% on State Forests and

16% on National Parks.

Of the 19,755 ha of Koala Hubs identified on State Forests, 15,522 ha occurs in north east NSW with some 12,324 ha (79%) outside logging exclusion areas (Forest Management Zones 1, 2 and 3) and thus available for logging. Of the total area of Koala Hubs on State Forests in north-east NSW 5,130 ha is within the proposed North Coast Intensive Zone, which will be open to widespread clearfelling. • Ten are already protected as part of the informal reserve system (as FMZs 2 and 3).

It is also apparent as discussed in more detail later that there was no credible process undertaken to identify the Governments Koala Strategy Koala Reserves and that OEH's ARCS and Koala Hubs, along with DPI's modelled Koala habitat and koala records, were ignored in the Government's selection of reserves. They are indeed a sham!

Conversely, the proposed Great Koala National Park encompasses 8,697 ha (44%) of NSW's Koala Hubs on State Forests in 2 ARKS. The OEH data strongly supports its exceptional importance of for koala conservation in NSW.

It similarly supports the NPA's 50 new parks koala reserve proposals . The BEC supports In the National Parks Association and NEFA recommendations that :

- 1. The importance of the Great Koala National Park means it should be created as a priority step towards genuine koala conservation.
- 2. 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 identified 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.
- 3. For land clearing and private native forestry (PNF) existing data must be applied to identify areas of potential high-quality koala habitat and habitat linkages within ARKS for protection. For PNF, current koala prescriptions, including protection of all primary feed trees over 30cm in diameter, should be applied in all identified koala habitat.
- 4. Around the key urban areas (i.e. Potsville Bogangar; Lismore; Brunswick Heads Byron Bay; Iluka; Coffs Harbour Repton; Port Macquarie; Nelson Bay Raymond Terrace; Campbelltown -Wollondilly Southern Highlands; Bermagui) there is an urgent need to build on existing work and SEPP 44 by getting a panel of independent experts to prepare koala plans that identify: remnant koala habitat for protection; corridors; key road crossings; key urban areas for encouragement of koala friendly measures (e.g. speed limits, koala friendly swimming pools, koala friendly fencing, control of roaming dogs); areas for replanting and funding requirements.
- 5. Current threats to koala habitat (logging, land clearing, urban development and PNF) are being considered in isolation by the NSW government, which poses huge threats to koala hubs and ARKS. There is an urgent need for the Federal Environment Minister to use powers under the Environment Protection and Biodiversity Conservation Act to intervene and consider cumulative impacts on the species before impacts worsen, with a view to concrete measures to protect koala habitat.

(b) the impacts on koalas and koala habitat from:

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

The impact on koalas and koala habitat from the Coastal Integrated Forestry Operations Approvals and Regional Forest Agreements can be understood by assessing recent logging by the Forestry Corporation of Koala Hubs delineated by the Office of Environment and Heritage.

Koala populations in NSW are in precipitous decline. The threats are immense in coastal areas (where most hubs are), making the protection of the 19,785 ha of Koala Hubs on State Forests in hinterland areas the highest priority for the basis of a koala reserve system to safeguard core Koala populations and begin to stabilise koala numbers.

Further work has been undertaken by WWF which identifies Koala Reserves based on a broader analysis of Koala Hubs, though this assessment is limited to Koala Hubs as identified by OEH. <u>https://www.wwf.org.au/knowledge-centre/resource-library/resources/the-koala-conservation-plan#gs.t1nrcf</u>

This review found that of the OEH Koala Hubs on State forests in north-east NSW, 2,546 ha has been logged over the 4 year assessment period 2015-2018, which is an average of 636 ha logged per annum within Koala Hubs.

It is assumed that some 430 ha of Koala hubs have so far been logged since they were identified. Many more are proposed for logging in current harvesting plans, Outside exclusion zones and plantations there are 12,253 ha of Koala Hubs identified on State Forests, which means that over the past 4 years 21% of the loggable area of Koala Hubs within native forests on State Forests have been logged. Many of these have been logged well in excess of allowable logging intensities, with significant areas subjected to the unlawful logging practices of heavy and regeneration Single Tree Retention. Of the 2,546 ha logged from 2015-2018, 1,283 ha (50%) has been modelled by DPI Forestry (Law et. al. 2017) as high quality Koala habitat and 574 ha (23%) as medium quality habitat. There are also 590 Koala records within the logged areas of the Koala Hubs. These confirm the importance of these areas for Koalas, and emphasise that this should have been well known to the Forestry Corporation before they logged them.

Over the period 2015 to March 2017 in the Lower North East forestry region, of these logged Koala Hubs 22 ha is identified as being subject to the unlawful logging regimes of Regeneration Single Tree Retention (STS), 116 ha to heavy STS, and 348 ha to medium STS.

It is evident from Harvesting Plans that intensive logging of Koala Hubs is more widespread than indicated by these figures, which is also shown by satellite images. This shows that many of these Koala Hubs, and surrounding areas, were subject to more intensive logging than the logging rules allowed.

It is essential for the future of koalas that a moratorium be immediately placed on all remaining OEH Koala Hubs on State Forests, along with potential habitat within one kilometre, while further ground based assessments are undertaken to delineate the full extent these "highly significant" resident populations which, based on current records, are the highest priority for protection on public lands.

NEFA have prepared a detailed report on logging in Koala Hubs, from which most of the above data has been sourced, see:

https://assets.nationbuilder.com/ncec/pages/40/attachments/original/1552535918/Forestry_l ogging_of_OEH_Koala_Hubs.pdf?1552535918

(ii) the Private Native Forestry Code of Practice,

It is evident that Private Native Forestry has never been undertaken on an Ecologically Sustainable basis because of;

- political interventions, lack of political will,
- opposition from some landholders,
- failure to adopt best practices,
- refusal to adopt science-based prescriptions and consider relevant environmental research,
- refusal to require pre-logging surveys and apply mitigation measures for threatened species,
- inadequate retention and recruitment of old trees,
- failure to undertake assessments to identify ecosystems and features requiring protection,
- inadequate protection of streams and riparian buffers,
- failure to take into account forest degradation and require rehabilitation,
- failure to monitor the effectiveness of prescriptions and apply adaptive management,
- failure to undertake effective regulation,
- secrecy surrounding PNF operations, and
- contempt for genuine community concerns.

The NSW Government needs to overcome its obsession that logging is the only possible use of native forests and begin promoting forests for all their values, while encouraging and facilitating conservation measures.

Private native forests forests have numerous non timber values, such as flora and fauna habitat, carbon sequestration and storage, attracting rainfall, regulating stream flows, aesthetic, recreation and spiritual values, that should be considered as part of any assessment of forests.

Private native forest assessment should consider these values and identify all opportunities for landholders, not just forestry, such a

- conservation covenants,
- funding for bush rehabilitation,
- funding for habitat protection (i.e. core Koala habitat), biobanking,
- stewardship payments, and
- the potential for carbon credits for avoided emissions.

The Government needs to consider stewardship payments, assistance for the protection of high conservation value areas and providing annual payments to landowners for the volumes of carbon stored in their forests.

The preparation of a Property Vegetation Plan should be regarded as an opportunity to undertake a full assessment of all environmental values and constraints, including undertaking surveys for threatened species, as well as identifying all potential management options. It is the opportunity for landowners to learn about the values of their properties, management options and opportunities for funding assistance.

(iii) The old growth forest remapping and rezoning program

Based on fraudulent advice of resource shortfalls the NSW Government is intent on logging High Conservation Value (HCV) old growth and rainforest added to the Comprehensive Adequate and Representative (CAR) reserve system as Informal Reserves in 1998 and 2003.

The Government has changed the targets, criteria and methodology so that they can remap most old growth and rainforest out of existence. Then they intend to rescind the remapped forests designation as Special Management Zones under the Forestry Act and remove them from the NSW Heritage Register so they can be logged.

Irrespective of definitions and thresholds, those stands mapped as oldgrowth are the most intact stands remaining on State Forests as they are dominated by old and mature trees and have not been logged for at least 20 years (if ever).

They were identified as HCV because they are high quality habitat for an array of oldgrowth dependent fauna and/or make a significant contribution to multiple reserve targets. They provide refuges in a sea of regrowth and essential stepping stones linking National Parks.

Having agreed to these areas being protected, out of greed the logging industry wants them back.

According to the Forestry Corporation's own data there is no resource shortfall and no justification for removing these forests from the already inadequate reserve system for logging. The NSW Government should immediately rule out this assault on north east NSW's oldgrowth, rainforest and CAR reserve system.

For mapping they adopted the discredited criteria that are applied to Private Native Forestry (PNF). In the NRC's oldgrowth remapping trials they did not account for tree species that do not develop senescent crowns and reduced the regrowth threshold from less than 30% to less than 10% (automatically removing 13% of oldgrowth), used higher resolution photography that increases the visibility of regrowth (and therefore its percentage), undertook dubious disturbance assessments and thereby remapped 88% of HCV oldgrowth out of existence.

The NRC similarly used a different definition of rainforest than what was applied in the CRA, with NRC noting "*The primary difference is that the PNF definition excludes areas with emergent non-rainforest species that exceed 30 percent of the upper crown cover*" (including brushbox and turpentine). The trial remapping removed 62% of mapped rainforest.

The outcome of these multiple attacks is that of the 103,000 ha of HCV oldgrowth in Informal Reserves on State forests, up to 58,600ha (57%) may be opened up for logging using the NRC's criteria and methodology. Of the 81,567ha of mapped rainforest up to 50,571 hectares could be opened up for logging

BEC does not accept the NRC's new targets or mapping criteria and methodologies as being valid or consistent with the national forest reserve criteria (JANIS). Nor do we accept that there may be some minor cases of mapping errors and that there was some logging of stands before they were protected, though this is true for the whole of the reserve system, and we does not accept this as a valid reason for removing such areas from the CAR reserve system.

Irrespective of definitions, the BEC considers those forests mapped as oldgrowth are of immense value as the most intact stands of forests left on State Forests as they:

- are part of the CAR reserve system,
- are dominated by oldgrowth and mature trees,
- Are important koala habitat,
- have escaped the intensive logging of the past 20 years,
- have been identified as high conservation value for multiple attributes,
- provide important habitat attributes and refugia for numerous threatened fauna not provided for by regrowth,
- provide essential corridors and stepping stones between national parks,
- are important carbon storehouses,

(iv) the 2016 land management reforms, including the Local Land Services Amendment Act 2016 and associated regulations and codes . The NPA has not reviewed this 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,

The NSW Koala Recovery Plan placed significant emphasis on protecting koala habitat on private land through SEPP 44 and Local Environment Plans (i.e. Actions 1.13, 1.15, 1.19, 1.20).

State Environmental Planning Policy No. 44 (Koala Habitat Protection) came into effect in 1995 with the aim to:

"encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and
- by encouraging the identification of areas of core koala habitat."

Under the provisions of SEPP 44 local councils cannot approve development on lands greater than 1ha without an investigation of potential and core koala habitat. To this end SEPP 44 requires councils to address koala conservation through either Individual Koala Plans of Management (IKPoM) for a specific site/development, or Comprehensive Koala Plans of Management (CKPoM) that will apply to part or the whole of a Local Government Area.

SEPP 44 encourages Councils to systematically identify areas of 'core koala habitat, stating that councils "should" conduct koala surveys, and take the results regarding core koala habitat into account when making environmental protection zones and development control plans

By encouraging the inclusion of areas of core koala habitat in environment protection zones". SEPP 44 identifies two classes of habitat:

1."core koala habitat" means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population, and

2. "potential koala habitat" means areas of native vegetation where the trees of the types listed in Schedule 2 constitute at least 15% of the total number of trees in the upper or lower strata of the tree component.

In the 24 years since SEPP 44 came into force in 1995 with the objective of identifying and protecting core koala habitat on private lands **five** CKPoM plans have been adopted and approved by the Department of Planning and Environment, with two only for parts of Local Government Areas. Of the five Comprehensive Koala Plans of Management (CKPoM) approved the Coffs Harbour CKPoM and the recent Ballina CKPoM are the only ones to identify core Koala habitat across the LGAs, and the Kempsey CKPoM only identifies two very small areas.

In 2007 the NSW Government finally gazetted a set of weakened mandatory rules to control logging on private land in NSW as a Regulation under the Native Vegetation Act 2003, with four Codes of Practice for separate geographic regions. The regulation came into effect on 1st August 2007.

Despite the requirements of the PNF Code the EPA have continued to issue PNF approvals for core koala habitat. It is clear that the NSW Recovery Plan's objective to conserve koalas in their existing habitat by identifying and protecting 'core Koala habitat' in accordance with SEPP 44 and by LEP zoning has not been implemented.

For koalas, the specific provisions for the PNF Code of Practice are:

- (a) 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
- (b) Any tree containing a koala, or any tree beneath which 20 or more koala faecal pellets (scats) are found (or one or more koala faecal pellets in Koala

Management Area 5) must be retained, and an exclusion zone of 20 metres (50 metres in Koala Management Area 5) must be implemented around each retained tree.

- (c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath them canopy of any primary or secondary koala food tree, the following must apply;
 - (i) A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.
 - (ii) These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.
 - (iii) (iii) Damage to retained trees must be minimised by directional felling techniques.
 - (iv) (iv) Post-harvest burns must minimise damage to the trunks and foliage of retained trees.

Clause (a) is next to useless as the intent of SEPP 44 to identify core koala habitat across private lands has not been implemented. Even where core koala habitat has been identified it does not guarantee protection.

Clauses (b) and (c), like all species specific provisions in the PNF Code of Practice, are triggered by either the existence of koala records in the Atlas of NSW Wildlife or the identification of the presence of koalas (or evidence of their presence) by the landholder and/or a logging operator. There are limited records in the Atlas of NSW Wildlife for forested private lands away from coastal towns, and they are by no means comprehensive.

The PNF Code of Practice does not require prelogging surveys for koalas or any other species, which means they are usually neither identified nor protected.

Bellingen, like Nambucca Nymboida(Now part of Clarence Valley) and Coffs Harbour LGA is listed on Schedule 1 of SEPP 44, Thus the region covering the proposed Great Koala National Park as a whole is included in Schedule 1 of SEPP 44.

The review of SEPP 44 has been underway for some time.

Between 18 November 2016 and 03 March 2017 The NSW Government sought feedback on the Explanation of Intended Effect (EIE) of proposed amendments to State Environmental Planning Policy 44.

The EIE described how the various parts of the proposed amendment will work and what they are seeking to achieve. The key changes the proposed amended SEPP will implement relate to the:

- definitions of koala habitat;
- list of tree species;
- list of councils; and
- development assessment process.

To support the proposed amendment of the SEPP, the Department proposed to prepare updated guidelines that clearly:

• set out the requirements for preparing comprehensive plans of management; and

• direct the consistent assessment of development applications.

The Department also proposed the strategic planning outcomes in SEPP 44 be transferred to the more appropriate setting of the Local Planning Directions under section 117 of the Act.

The BEC is concerned the proposed revision of SEPP44 was not accompanied by a published review of the effectiveness of the application of the Policy over the last twenty four years. The lack of any published review of SEPP 44 to date substantially limits the extent the BEC could assess whether the revision would increase its effectiveness.

The review of SEPP 44 was undertaken at the same time as the NSW Chief Scientist report to prepare a "Koala Management Strategy" for NSW which will effectively replace the 2008 Koala Recovery Plan.

The BEC believes the intent of the proposed amendment to SEPP 44 is too narrow and its role in the NSW koala conservation planning process is conflicted by the concurrent release of the Chief Scientists report and call for submissions on that report also up until the 3rd March 2017.

Recommendation 4, (p36) of the Chief Scientist's report states

" That the Government improve outcomes for koalas through changes to the planning system."

Under this recommendation the Chief Scientist's report goes on to say:

"In addition to the current review of SEPP 44, within 12 months of receipt of this report Government should start a broader evaluation of the effectiveness of SEPP 44 as a planning tool and the Comprehensive Koala Plans of Management for protecting koalas and their habitat."

The first recommendation from the Chief Scientists report;

"That Government adopt a whole-of-government koala strategy for NSW with the objective of stabilising and then starting to increase koala numbers."

provides a strong statement of direction for integration of SEPP 44 into a whole of government approach towards koala conservation.

The following summary of limitations of the adjoining Coffs Harbour KPoM , prepared under provisions of SEPP 44 have been identified by a former senior Council staffer: and are also relevant to Bellingen LGA:

"1.Erosion of KPoM provisions under State government exemptions for land clearing on rural land including the introduction of RAMAs and new native vegetation clearing codes that undermine mapped koala habitat and severe important linkages and corridors.

1. Offsetting allowed under primary secondary and tertiary habitat enabled under the KPoM has led to a 'death by a thousand cuts' for areas mapped as koala habitat where developers take advantage of options to replace high quality habitat with inferior plantings under a Vegetation Management Plan (VMP).

2. The introduction of Private Native Forestry (PNF) has had a devastating impact on core koala habitat particularly after the State government refused to acknowledge the three levels of koala habitat (primary, secondary & tertiary) as core koala habitat within the meaning of SEPP44. This is despite Council arguing strongly to the contrary to the point where it engaged a QC to argue its case.

3. While State forests do not fall under an adopted KPoM they provide substantial areas of breeding habitat and important linkages across the landscape. State forests often adjoin

areas mapped as koala habitat under the Coffs KPoM and account for approximately 30% of the forested areas in the LGA. The IFOA has had a devastating impact on the quality and extent of available habitat for koalas in State forests as large volumes of large diameter trees have been replaced with young juvenile trees. This also makes forested landscapes particularly prone to frequent and intense wildlfires which can wipe out large populations in a single event. The recent introduction of the Coastal IFOA enabled by a rolled-over Regional Forest Agreement (RFA) of 20 years duration will see an increase in forest destruction at a magnitude not seen on the North Coast before. This will severely limit opportunities to maintain sustainable koala populations in many areas.

4. The State Government adoption of Biobanking has enabled development in areas of primary, secondary and tertiary koala habitat. It's yet to be seen what the impact of Biodiversity Development Assessment Reports (BDARs) under the Biodiversity Conservation Act 2016 will have on koala habitat as it enables development, all be it at a greater cost to the developer."

The BEC welcomed the opportunity to comment on the Explanation of Intended Effect State Environment Planning Policy No. 44—Koala Habitat Protection (EIE). Noting it had recent experience with the preparation of a Comprehensive Koala plan of management for the lowland forests in Bellingen shire. The implementation of the planning process where areas of protection in the draft plan were progressively removed in a number of steps was of major concern. The process set up a virtual blackmail of council to accept a vastly reduce area of protection or get nothing – it was an unedifying process that reflected poorly on the state agencies involved. Not a good promotion for comprehensive koala plans of management

In its submission the BEC expressed concern that the proposed revision of SEPP44 was not accompanied by a published review of the effectiveness of the application of the policy over the last twenty years. Despite DoPE stating that a comprehensive review of SEPP 44 has been undertaken the lack of any published review of SEPP 44 date limited the extent the BEC can assess whether the revision will increase its effectiveness.

The BEC was concerned that without seeing the wording of the guidelines we cannot be sure as to the final content and application of the SEPP and therefore as to whether the revision increases its effectiveness or not .

An aim of SEPP 44, to protect koala habitat and to ensure a permanent free-living populations over the present range and reverse the current trend of koala population cannot be achieved without a whole of government, koala population based planning process across all land tenures. The BEC has seen the effect of the comprehensive koala plan of management for the Bellingen Shire where proposed controls on private property are far more restrictive than those on the adjacent state forest .That position with virtually no koala protection measures applied to state forests is not credible

The following recommendations were made in the BEC submission on the EIE in the context that SEPP 44 should be more fully reviewed and incorporated into a whole of Government approach to koala conservation as recently recommended by the Chief Scientist.:

2. Application of the SEPP

Recommendation: Ensure that KPoM's are prepared for all land tenures over recognised Koala populations

3. Definitions

By ensuring that all identified tree species are considered habitat, and that non-listed species are considered

Recommendation: ensure that the definition of koala habitat includes all plant communities that have >= 15% of one or more listed tree species in the upper or lower strata of the tree component, as well as all vegetation that contains koalas. On-ground surveys should be used to identify plant communities.

Recommendation: ensure that koala habitat currently identified under CKPoMs is not rendered unprotected as a result of the amended definitions.

Recommendation: ensure that local government is adequately resourced to incorporate the changes into existing CKPoMs within 12 months of the changes taking effect.

4. The development assessment process

Recommendation: The requirement for a comprehensive plan of management to be retained.

5. Guidelines

Recommendation: The guidelines specify that digital aerial photographic interpretation is the only mapping method used in the first instance to identify koala habitat,

Recommendation: Require that an on-ground ecological assessment is necessary to confirm koala habitat and determine koala presence or absence.

Recommendation: ensure that the guidelines on surveys make particular reference to paddock trees and that paddock trees are assessed as to the presence of koalas regardless of whether they are a listed koala tree species.

6.Zoning

Recommendation: ensure that the new LPD gives local government the authority to effectively zone koala habitat into environmental protection zones, and that the 'Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs' LPD does not negate the revised SEPP.

7.List of tree species and local governments

Recommendation: ensure that local government is resourced to undertake the necessary revised koala habitat mapping.

8.Koala habitat and occupancy assessments

The BEC supports undertaking a habitat suitability and koala occupancy assessment prior to a DA being submitted.

Recommendation: ensure that both the guidelines and CKPoMs are statutory documents that enable local governments to refuse DAs that pose an unacceptable risk to occupied and unoccupied koala habitat. We caution against developing guidelines that have a lower standard or which are less enforceable than CKPoMs as this will act as a disincentive to create a CKPoM.

Monitoring and Research

The NSW Koala Strategy released on the 6 May 2018 includes an ambitious list of monitoring and research projects. The BEC is concerned the Government is likely to report to the Inquiry on the Strategy in glowing and exaggerated terms.

From the tardiness in the relevant agencies completing and public reporting on koala SOS projects to date, little difference is expected in relation to the Strategy. **Questions should be asked as to the implementation, independence ,(where claimed or considered appropriate) reporting and scheduled reporting on the projects.**

For example selected extracts are quoted and commented on below :

"Monitoring

The Office of Environment and Heritage is developing a statewide monitoring program in partnership with other agencies. We will monitor koala populations and their habitat, and measure the effect of the actions in this Strategy. The program will start with 10 to 30 sites across different koala habitats and land tenures. At these sites, the responsible land manager will monitor and report on:

• the distribution, size, demography, genetic diversity and trends of the koala population

- the extent and quality of habitat
- the distribution, intensity and impact of threats to koalas
- the health of koalas the impact of management actions.

The monitoring program will also be linked to the local community actions so that we are monitoring outcomes from that investment, and linked to fauna rehabilitation to gather data and learn from that important work. All information we collect about koalas will be publicly available through the NSW Government's Sharing and Enabling Environmental Data (SEED) portal."

Appropriate questions to the Government on monitoring :

- Has the monitoring program been designed as yet?
- Has it or will it be subject to independent review?
- Why monitoring is not to be independently conducted rather than conducted by "the agencies"?

"Implementing, reporting on and evaluating the Strategy

The Office of Environment and Heritage will coordinate implementation of the Strategy through an inter-agency committee of senior officers from NSW Government agencies. The inter-agency committee will:

• advise on the development of the local actions for koala populations

• report to the Minister for the Environment each year on progress in implementing the threeyear statewide action plan and local actions.

To inform the annual progress report and to achieve an adaptive management approach, an annual meeting will be convened with the NSW Chief Scientist & Engineer and other independent expert panel members to review the work completed during the year and provide advice on priorities for the coming year.

Annual progress reports will be published on the Office of Environment and Heritage website.

In three years we will evaluate the progress of statewide and local actions and reassess the priorities for further actions. We will consider the lessons learned and how they could apply to the management of other threatened species.

The NSW Chief Scientist & Engineer and independent experts will be engaged in the threeyear evaluation. Learnings from evaluating the Strategy will help inform what we do for other threatened species in New South Wales."

Appropriate questions

- Has the first annual report been prepared and released?
- Has the Chief Scientist and other independent expert panel members reviewed the annual report and are their comments available?

"Supporting priority research

The NSW Government will invest funds to deliver priority research under a research plan to be informed by a research symposium.

Current knowledge gaps include:

- causes and impacts of disease
- bushfire risk and the impact of bushfire management activities such as planned burns to address the risk
- future habitat availability
- impacts and potential benefits of translocation.

Funding to support the research plan will help leverage additional funds by supporting linkage grants and partnerships with other research institutions. A further investment will be made to research the impacts of natural hazards and weather events on koalas. Focus areas for this research include:

- the links between heatwave and other threats to koalas such as the onset of chlamydia
- changes in availability of preferred koala habitat including eucalypt leaf quality
- bushfire forecasting.

Research on koala responses to native forest harvesting

The Natural Resources Commission will deliver an independent research project to better understand how koalas are responding to regeneration harvesting on the North Coast of NSW. The project will be government funded and peer-reviewed."

Appropriate questions

- Is the research plan completed and available, if not when is it expected?
- Who is involved in the "*independent research project*" to better understand how koalas are responding to regenerating harvesting?
- How is independence of the regenerating harvesting research project being guaranteed?
- Are the former DPI Forestry staff (now?) heavily involved in the project?
- Has not the effects of regenerative or intensive harvesting on koalas been clearly known for 20 years?
- Does the regenerative harvesting project have appropriate animal ethics approvas?

Local koala conservation efforts and case studies

The Bellingen and Coffs Harbour areas are endowed with a rich biological diversity and koalas are the most prominent of the threatened fauna. For many people the area provides the rare and exciting experience of seeing koalas in their natural habitat. In many other parts

of New South Wales and regrettably in recent years in some parts of our area, koalas have disappeared.

Koala conservation has been an issue in the area for 50 years Community campaigns raged through the 1980's to protect koala habitat at a number of locations in local forests and around Coffs Harbour and Sawtell townships. And have continued to the presen.

The Appendix to this submission presents summaries of a number of case studies of koala conservation campaigns extending back over 40 years.

Below is a distillation from case studies of key lessons for koala conservation:

Roberts Hill

- Local koala campaigning around Coffs harbour has been going on for over 40 years.
- Campaigning is a challenging, demanding and exhausting commitment of community resources.
- Restoration of koala habitat is also a hard slog and takes even longer.
- Koala habitat protection needs both local and landscape protection actions and continued vigilance.

Pine Creek SF.

- Government agencies can stall and resist the protection of even the most iconic koala populations.
- Agencies can throw almost endless resources against koala conservation campaigns.
- Often the fight appears it will never end.
- A remote concession or compromise can sometimes spoil your outcome
- The community never gives up.

Gladstone SF

- Out of town out of sight further from scrutiny they think!
- A lot of community work for very little gains.
- The regulatory agency is a distant, sleepy and disinterested landlord.
- Effective regulation is apparently up to the community.
- Nor is the Department of Environment and Heritage on the job.
- A video in the hand is worth....
- What's a few dollars in the Governments bank- it didn't change their behaviour

Lot 2 Sawtell

- The SEPP and KPoM framework provided for initial identification and protection of core koala habitat.
- Reckless disposal of important Council environment assets has led to undesirable and expensive outcomes.
- The Biodiversity Conservation Act has undermined sound and long established protections for koala habitat.
- Assertive developers will push the limits.
- The community will fight back.
- It will cost more to defend the Koala habitat on this land than to buy it

Roses Creek and Scotchman State Forests – the upper Kalang catchment

- Even further from town and;
 - even sloppier planning and processes,
 - closer to the biological and World Heritage riches of nature,
 - Even greater ignorance of koala populations, and
 - reckless regard for catchment and landscape protection.
- if you don't look you don't see.
- It's up to the community to find and define the biological treasures

(d) identification of key areas of koala habitat on private and public land that should be protected, including areas currently at risk of logging or clearing, and the likely impacts of climate change on koalas and koala distribution,

In 2012 conservation groups responded to community reports of dramatic declines in koala populations on the NSW North Coast by commencing a number of koala conservation assessments. Initial assessments were undertaken in five Local Government Areas on the upper mid-North Coast and hinterland areas (northern Kempsey, Nambucca, Bellingen, Coffs Harbour, Clarence Valley and Richmond Valley).

The assessments used koala habitat mapping, combined with collated koala locality records and local knowledge of koala ecology and key habitat, to derive a number of mapped outputs relevant to koala conservation assessment and planning in the region, including the identification and mapping of :

- koala dispersal barriers;
- seven likely koala regional populations;
- twenty-five likely koala sub-populations as focus areas for further targeted surveys, monitoring and research; and

• three likely metapopulations (metapopulations being groupings of subpopulations that periodically exchange individuals).

The Great Koala National Park and other reserve proposals were derived using community data and expert opinion from within the North Coast region focussed on describing and mapping the koala populations on the North Coast and hinterlands and identifying areas of state forest that contain koala habitat and would be best included within the reserve system. see; <u>https://drive.google.com/drive/folders/0BxrDWhFTAAvBRy1qMnRqVGhFMm8</u>

1. The Coffs Harbour—Guy Fawkes metapopulation

This is centred on the Coffs Harbour, Northern Bellingen and south-western Clarence Valley LGAs, and extends from the coastal plains at Coffs Harbour/Bongil Bongil National Park west through hinterland and escarpment forests to Guy Fawkes River National Park. This metapopulation is considered to be of national significance as a koala core area.

This same forest gradient has also been identified as significant in other conservation assessment and planning programs. It is clear that management programs need to be explored and promoted to ensure the long-term persistence of this critical forest area, where the Great Escarpment approaches the coast.

2. The Bellinger—Nambucca—Macleay metapopulation

This extends south and west from the southern Bellingen LGA to encompass the Nambucca LGA and the northern part of the Kempsey LGA to the Macleay River valley. This koala metapopulation is also considered to be nationally significant.

In order to provide koalas with the protection they need the National Parks Association have recently proposed the Great Koala National Park and a series of smaller Koala Parks throughout north east NSW. <u>See:</u>

https://drive.google.com/drive/folders/0BxrDWhFTAAvBRv1qMnRqVGhFMm8A

The Great Koala National Park proposal included all public land with the Coffs Harbour - Guy Fawkes metapopulation and the Bellinger - Nambucca - Macleay metapopulation boundaries. It would add 175,000 ha of public state forests added to existing protected areas to form a continuous 315,000 ha reserve of public land (Fig 1) The proposed GKNP adjoins World Heritage-listed reserves, including New England and Dorrigo and Guy Fawkes National Parks to form a proposed conservation complex of half a million hectares extending from the tablelands to the Coast.

The Great Koala National Park contains 56% of all koala hubs in state forests on the north coast of NSW It is therefore no exaggeration to identify it as the most important area of public land in the state for koala conservation.



Map of the Great Koala National Park proposal indicating state forests (pale green) and existing national parks (dark green). The park stretches from Woolgoolga in the north to South West Rocks in the south

The fact that the Hubs and Arks data in most cases, including that of the Great Koala National Park, strongly corroborates the community reserve proposals and provides confidence that the reserves are well designed for koala protection. However, we acknowledge that contemporary surveys of some areas would be desirable in order to confirm the utility of the areas to koalas. For example recent citizen surveys in Roses Creek and Scotchman State Forests have identifies significant koala numbers in a section of the proposed great Koala national park outside the OEH koala hubs

The community initiated Great Koala National Park and other reserve proposals have some additional strengths relative to the OEH & WWF hubs data. The Hubs are based primarily on koala records analysed for a measure of persistence. Therefore, by their nature, hubs are likely to be biased towards areas of greater survey effort and/or areas where more people live and away from more remote hinterland areas and private land (the latter is typically under-surveyed). Using expert ecologist knowledge to analyse the landscape configuration, while incorporating knowledge of koala occurrence, distributions and population trends from local koala carers and conservationists, adds another layer to records-based analysis. Hence many of our reserve proposals include areas that were not identified as hubs.

As confirmed by recent citizen scientist surveys in Roses Creek State Forest the hubs data will likely overlook areas of occupied habitat that need protection to achieve an adequate koala reserve system. There is therefore an urgent need to undertake systematic regional surveys to identify all areas of resident populations to target for reservation if koalas are to achieve the protection required to halt their decline towards extinction. The hubs are those areas that the available data identify that we need to urgently reserve to protect resident populations. It will be necessary to protect and restore adjacent habitat to first stabilize, then grow, these core populations.

The NPA's 50 new park proposals for koalas take the likely impacts of climate change on koalas and koala distribution into account to a degree, especially with reserve proposals that extend from the coast to the Great Dividing Range.

(e) the environmental, social and economic impacts of establishing new protected areas to conserve koala habitat, including national parks.

The BEC supports the proposed economic study of the Great Koala National Park by Great Koala National Park steering committee as described in their submission to the Inquiry . The Approach involves identifying different management scenarios and building blocks consistent with the park proposals, viz:

- Scenario 1 Change in tenure and basic conservation management and repair
- Scenario 2 Publicly and privately funded ecotourism attraction
- **Scenario 3 –** The GKNP in a regional ecotourism model

Table 1. Proposed GKNP Indicative "Building blocks" and "scenarios"

Building blocks Park establishment Park management Koala habitat restoration Koala centre of excellence Private property support World heritage Assessment GKNP visitor centre Pine Creek Bowraville visitor centre Multi-day bushwalk GKNP mountain bike network " coast walk " self-guided car tours " coastal cycleway " horseriding trails " Fourwheel driving tours	Scenario 1 U U U U U	Scenario 2 U U U U U U U U U U U U U U U U U U U	Scenario 3 U U U U U U U U U U U U U U U U U U U
" Fourwheel driving tours		•	U
" Local bushwalk network Ecotourism support program		U U	U U
Identify nature based tourism Dorrigo visitor centre upgrade		U	U U
Sealy's lookout eucalypt theme visitor centre Solitary islands Marine park Visitor centre			U U
Coffs Harbour Aboriginal cultural heritage centre			U
Nambucca heads visitor centre Schuttle bus networks			U U

The project will assess the economic impacts of the proposed Great Koala National Park within each LGA in terms of:

- 1. Potential jobs, including categories of jobs.
- 2. Additional visitor nights, spend and occupancy rates generated in the LGA.
- 3. Multipliers per sector.

The Project will provide a written report outlining the objectives, methodology and analysis of the economic impacts dissected for each LGA. and will address the area of environmental, social and economic impacts of establishing new protected areas to conserve koala habitat for the proposed Great Koala National Park

Appendix Case studies

Case Study 1. Roberts Hill Coffs Harbour

Key lessons

- Local koala campaigning around Coffs harbour has been going on for over 40 years.
- Campaigning is a challenging, demanding and exhausting commitment of community resources.
- Restoration of koala habitat is also a har d slog and takes even longer.
- Koala habitat protection needs both local and landscape protection actions and continued vigilance.

Community campaigns raged through the 1980's to protect koala habitat in local forests and at a number of locations around Coffs Harbour and Sawtell townships.

The 1986/87 NSW Koala Survey found that koalas were in serious decline in NSW, and the 1988 NSW Koala Summit recommended actions at a local government level to arrest this decline. Coffs Harbour was identified as a major koala population area in need of urgent attention.

Roberts Hill is a small but significant area of koala habitat and potential habitat on the western edge of Coffs harbour township

Early campaigns ran into a road block at a meeting of Coffs Harbour City Council in February 1989 prompting a bold heading in the Coffs Harbour Advocate on Wednesday 22 that ;

"COUNCIL REFUSES TO PROTECT WILDLIFE"

That Council meeting rejected moves to impose tree preservation orders to protect koalas on three areas in the city, being:

- 1. The next stage of Council's own Quenwill estate at Bayldon,
- 2. The proposed urban area between Lyons Road and Bonville creek, and
- 3. A proposed koala reserve on Roberts Hill on the western edge of the town of Coffs Harbour .

In regard to Roberts Hill, local residents had written to Coffs Harbour City Council in January 1988 requesting the establishment of a koala reserve, nature trail and lookout in the area. The residents noted then that '*The demise of koala habitats within our city boundaries is accelerating with greater development of our area*..."

The failure of representations led to a protest march held in September 1990 at which local protestors were arrested.

The Roberts Hill issue was dragged into to the Land and Environment Court in 1990 before resolution to protect the reserve . On ground action to restore koala habitat on Roberts Hill has taken longer really only gaining momentum in the last five years.

In recent years a new threat to Roberts Hill koala habitat, the proposed Pacific Highway western bypass of Coffs Harbour has emerged raising doubts as to its continued viability.

Case study 2. Pine Creek State Forest.

Key lessons

- Government agencies can stall and resist the protection of even the most iconic koala populations.
- Agencies can throw almost endless resources against koala conservation campaigns.
- Often the fight appears it will never end.
- A remote concession or compromise can sometimes spoil your outcome
- The community never gives up.

There has been ongoing and unresolved conflict over timber harvesting in Pine Creek State Forest (PCSF) since early 1995 and it continues today .

The National Parks & Wildlife Service (NPWS) withdrew the licence for logging in PCSF in October 1995 as a consequence of extensive clearfelling of core koala habitat by State Forests (NSW) and a total disregard for all koala protection protocols.

Continued community pressure brought about the formation of a committee made up of representatives from State Forests (NSW), NPWS, 2 timber industry representatives, 2 conservation representatives and 1 independent koala scientist to oversee a Koala Management Plan.

Scientific research was undertaken and after almost 2 years a Koala Management Plan was prepared. What became clear from reports from the research was the local regional and State significance of the Pine Creek koala population, numbering an estimated minimum of 400 animals.

The plan was reviewed and made available for public comment. The overwhelming response was the expressed concerns from the public that the plan of management would not adequately protect the koala population: in particular the "interim" nature of the planned koala reserve and allowing for high impact "gap style" forest operations to continue.

Due to these concerns and in order to gain the best guarantee for the long term protection of the koala and its habitat, the North East Forest Alliance (NEFA) and the Pine Creek Koala Support Group (PCKSG) had no alternative other than to put forward the Pine Creek National Park proposal in July 1998.

Yet again PCSF made the front pages ("Under Threat" Coffs Harbour Advocate June 8 2001) due to intensive gap clearfells.

Around this time a major highway upgrade was announced for the Pacific Highway through the Bonville Area. This bisected PCSF and because of its now recognized State significance as a major koala population a Koala Study was tendered out and awarded to the Australian Museum.

This was a ten year study to gauge the impacts of a major highway construction on a koala population. Koalas were caught, radio collared and tracked for a 10 year period – 3 years prior to highway construction, 3 years during construction and 3 years after construction.

The Koala Study gave valuable information re accurate home range sizes and many other facts and was one of the first to state that forestry logging activities were a possible reason for a considerable possible decline in koala population.

Logging recommenced in 2006 and once again community concerns were raised and the Friends of Pine Creek community group was formed and released a community discussion paper: "Reservation Options for Pine Creek State Forest" seeking comment on the best way to protect PCSF.

The Friends of Pine Creek consisted of representatives from Pine Creek Koala Support Group, Bellingen Environment Centre, Native Forest Network, Ulitarra Society and the Rainforest Information Centre.

At the beginning of 2003 the then Premier of New South Wales, the Hon. Bob Carr made a visit to the North Coast and announced that if his government was re-elected he would make PCSF a National Park as part of the iconic listed forests because of its large Koala population.

Bob Carr honoured this promise when re-elected in 2003. Approximately half of Pine Creek State Forest became National Park of 3000 hectares, and half remained State Forestapproximately 1000 hectares Native Forest and 1900 hectares hardwood plantation. Many of the latter were converted mixed hardwood, Blue Gum and Tallowwood types.

In 2006 the clearfelling of these hardwood plantations began in earnest and by 2011 over 1500 hectares had been clearfelled.

Considering the findings of the Australian Museum Study this clearfelling would have had a major impact on the overall koala population of Pine Creek State Forest.

In 2001 compartments 32, 33, 41, 48, and 49 were scheduled for clearfelling. A 2-hour field search with personnel from State Forests NSW and a representative for Bellingen Environment Centre found two koalas, both on log dumps. Some concessions were made where areas of mixed hardwood regrowth within the plantations were rezoned as native forest.

The "Koala Management Plan" was still applicable at this time. In May 2012 the then NSW Environment Minister, Hon Robyn Parker MP, suspended the Koala Management committee and approved cessation of the Koala Management Plan.

Compartment 16 was clearfelled not long after this, again with some concessions after Koala sightings. Compartment 15 and part of Compartment 33, the only native hardwood plantations, were left – both important for koalas.

There has been a collapse of the koala population in Pine Creek State Forest due to this large-scale clearfelling regime. For a population of state significance, it seems unbelievable that it occurred and is about to occur again.

Two key compartments, 26 and 27 from the initial protest days were left out of The Bongil Bongil National Park as a negotiating compromise to alternatively protect some oldgrowth forest west of Woolgoolga The Forestry Corporation proposed logging prime koala habitat in these Compartments 26 and 27 in 2014. Against the threat of widespread community protest The logging has not gone ahead but the proposal was re-floated early this year.

The remaining forest in Pine Creek State Forest must be preserved for the sake of the surviving koalas and future generations.

Prepared by John Pile June 2019

Case study 3. Gladstone State Forest.

Key lessons

- Out of town out of sight further from scrutiny they think!
- A lot of community work for very small gains.
- The regulatory agency is a distant, sleepy and disinterested landlord.
- Effective regulation is apparently up to the community.
- Nor is the Department of Environment and heritage on the job
- A video in the hand is worth....
- What's a few dollars in the Governments bank- it didn't change their behaviour

Community audits of logging operations in Gladstone State Forest commenced in June 2017 when NEFA submitted a complaint about the inadequate road drainage and creek crossings resulting in major pollution of Woods Creek.

In August 2017, Local conservations joined calls by the National Parks Association for a deferral of the proposed logging of compartments 232 and 233 at Sunny Corner in Gladstone State Forest after finding evidence of a breeding colony of koalas.

Sixty eight koala records had previously collected from compartments 232 and 233 between 1997 and 2013. There were 68 trees found to have koala scats under them when the compartments were last systematically searched in 1997, with five trees found to have >20 scats (22,25, 35, 40 and 70).

In their pre-logging survey in 2013 the Forestry Corporation only found koala scats under 20 trees, with >20 scats only under 2 trees (20, 25) near log dumps 2 and 5.

Koalas had therefore been known to occupy the forest for at least the past 20 years. In light of the evidence of koala's decline on State Forests over this time it is essential that persistent populations be treated with the utmost respect.

Local citizen scientists in August 2017 found evidence of a mother and young, a distinctively small sized scat found together with larger koala scats at the base of a 30cm diameter Tallowwood tree. As well as those scats further findings of koala scats were made as well as numerous Grey gums with koala claw marks being observed.

The find of 380+ scats in the middle of proposed log dump 4 was an exceptional number of scats, demonstrating frequent use of these trees. These are clearly scats from at least one mother and baby, with many, very fresh scats.

In all the surveys leading up to protection of 1300 hectares of core koala habitat on private land through the Bellingen Koala Plan of Management, 5-10 was the highest number of scats found under any one tree.

Local environmentalists requested that the Office of Environment and Heritage be urgently engaged to conduct a survey to determine the area the colony requires to be protected for their survival. They noted that given the obvious regional significance of the widespread occupation by Koalas and its evident importance as a breeding colony local environmentalists considered that it should be protected in its entirety.

In particular they asked for:

- 1. immediately stop to further forestry operations in compartments 232 and 233 of Gladstone State Forest,
- 2. deploy OEH scat detection dogs to thoroughly search for koala scats and identify occupied habitat, and
- 3. ensure that logging is excluded from all identified core koala habitat.

The stated intention of the revised NSW Koala Strategy is to arrest the decline in koala numbers, then start to rebuild the populations. Local environmentalists pointed out the Government will never arrest the decline in koalas whilst they allow healthy populations like those in Gladstone State Forest and the surrounding state forests to be subject to intensive industrial logging.

The Department of Environment and Heritage have recently worked with Bellingen Shire Council to, identify and protect 1,300 hectares of core koala habitat on private land through a Koala Plan of Management in the general vicinity of Gladstone State Forest. It was noted that the requirement on private land is that logging be excluded from core Koala habitat, nothing less should be expected for public lands.

In the adjoining Coffs Harbour City Council, approximately 2,500 hectares of core koala habitat on private land, long included in a Koala Plan of Management, have recently been classified by your Government as "Sensitive Land" and is generally not available for logging.

The North East Forest Alliance reviewed all current logging operations in north-east NSW in June, and identified that only 1.2 ha was specifically set aside for protection in Koala High Use Areas, out of the 22,586 ha of north-east NSW's public lands subject to logging operations It was evident that something is very wrong with the assessment and protection of koala habitat on state forests when compared to protection on private land through koala plans of management.

If these facts become widely known, a rebellion by landholders against bearing the burden on private land of koala conservation can be predicted, it was stated

In January 2018 a coalition of eight local, regional and state environment groups made an urgent request to the Premier to stop the logging in Gladstone SF, after environment groups had been negotiating unsuccessfully for the Forestry Corporation and the Minister for the Environment for over five months

The groups Cited the "*Report of the independent Review into the Decline in Koala populations in Areas of NSW*" by the Chief Scientist to support a call for transfer of two compartments to be transferred to OEH and be managed as koala reserves Scientist but the approach to the premier was unsuccessful. A blockade was established.

Using on a mobile phone, whilst illegally in the forest in March 2018, a community member recorded water pollution from inadequately formed roads flowing into Woods creek during a heavy downpour. The recording was submitted to the EPA's Pollution watch and finally prompted some action from the NSW EPA. See: https://drive.google.com/open?id=1wrgPRrXuXwAsOyek1-U0PhOAoEdHvIna

At last, in late July 2018, the EPA moved against the Forestry Corporation over logging breaches in Gladstone State Forests following numerous community audits and reports of license breaches and pollution by the Forestry Corporation by representatives from the North East Forest Alliance and the Bellingen Environment Centre.

The Forestry Corporation was fined \$15,000 for failing to implement and maintain road drainage and \$15,000 for causing water pollution of Woods Creek in Gladstone State Forest as a result of the vigilance and reporting of community members.

Woods Creek is habitat for the endangered Giant Barred Frog and the endangered Purple Spotted Gudgeon.

"A \$30,000 fine is a pittance for directly and repeatedly degrading the habitat of two endangered species and releasing hundreds of tonnes of sediment into Woods creek to smother fish habitat and their gills all the way down to its mouth".

Said Jo Sparks from the North East Forest Alliance who reported the original offences.

It wasn't until community members again illegally entered the forest in March this year, took footage of extreme erosion occurring during a rainstorm, and sent that footage to the EPA's Pollution watch that some action was finally taken",

A BEC spokesperson said at the time.

The EPA Director of Forestry Michael Hood thanked community members who raised concerns, stating:

"Reports like this are an essential part of the EPA process, allowing us to investigate and take action if an issue is discovered." See; <u>https://www.epa.nsw.gov.au/news/media-releases/2018/epamedia180731-epa-fines-</u> forestry-corporation-of-nsw-\$30000

The Bellingen Environment Centre reminded Mr. Hood that each of the inspections undertaken by community members involved illegally entering a closed forest, at the risk each time of a \$2000 fine, to obtain evidence of the Forestry Corporations law breaking.

The public attention drawn to the logging of Gladstone State Forest as prime koala habitat and habitat for the Giant Barred frog and the Purple Spotted Gudgeon, including a blockade of the forest for five weeks, should put both the EPA and the Forestry Corporation on notice that their operations would be monitored.

Nevertheless, the Forestry Corporation drove over the inadequately-drained harvesting roads on a daily basis for months and the EPA used the same roads on their audit inspections without seeing any breaches or requiring any repairs.

"There were kilometres of eroding tracks throughout the catchment in urgent need of repair to stop active erosion. It seems that it is only when we film the sediment running into the creek that the EPA will do anything," said NEFA's Mr. Sparks

This was a double whammy for Bellinger River system with the Forestry Corporation also recently fined \$15,000 for water pollution from clear felling forests at Glennifer.

The EPA also advised at the time that they were continuing to investigate the range of other matters raised by community members over logging in Gladstone State Forest. Some of the reports had been submitted over 12 months earlier.

Environmentalists claimed there are hundreds of offences that had been committed in Gladstone State Forest, and having issued this token fine we know from experience that the EPA will let them off scott free for the rest and do nothing to require rehabilitation of the kilometers of other eroding tracks in the catchment.

Much of the logging in the Bellinger catchments is occurring on soils known as the "Nambucca Beds" which are some off the most erosion prone soils in eastern NSW.

Case study 4. Lot 2 Sawtell

Key lessons

- The SEPP and KPoM framework provided for initial identification and protection of core koala habitat.
- Reckless disposal of important Council environment assets has led to undesirable and expensive outcomes.
- The Biodiversity Conservation Act has undermined sound and long established protections for koala habitat.
- Assertive developers will push the limits.
- The community will fight back.
- It will cost more to defend the Koala habitat on this land than to buy it

Lot 2 Sawtell Road, Boambee East, contains approximately 9 hectares of undeveloped bushland which sits between an existing housing estate and the Industrial Complex on Hitech Drive to the East.

The proposed development for 62 residences will result in a total loss of approximately 7.1ha of native vegetation, The site contains Primary Koala Habitat and both regionally and locally significant habitat linkage corridors. Approximately 6.3 ha of primary koala habitat will be removed. As such, the proposal is inconsistent with the Coffs Harbour City Koala Plan of Management, LEP and DCP.

5.5 ha represents over cleared vegetation types that require additional protection under local environmental planning instruments. Two vegetation communities floristically represent the endangered ecological community Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions.

The proposal seeks to offset impacts and deviations from statutory planning instruments through biodiversity banking offset mechanisms. A 50m wide corridor is proposed to be retained and rehabilitated as primary koala habitat local to the site. There would be an immediate loss of function during the initial establishment of this corridor.

Once owned by Coffs harbour City Council, the land was traded, along with other parcels of land, with the CEx club in the early 1990's for the land off Hogbin Drive, where Southern Cross University was established .

It appears that Lot 2 had been zoned R2 low density residential, for some time. This fact seems to have been widely ignored by the real estate industry and was not general knowledge by the local landholders prior to advertising for sale by the CEx club commenced in 2015.

The land was sold in May 2016 along with Lot 21 Hogbin Drive to the current developer, Regional Ethical Development Coffs Coast, They paid CEx a reported \$385K for Lot 2.

The BEC and the Steering Committee of the proposed Great Koala National Park and many local residents made a submission to Coffs Harbour City Council on the development proposal submitted by Regional Ethical Development Coffs Coast (REDCC) for Lot 2 Sawtell (DA0818/18DA lot 2 Sawtell DP 811796)

The BEC submission raised quite a few points of concern which can be summarised as:

- 1. the EEC mapping and identification,- Assessment of EEC The claimed rejection of the EEC on the basis of soil classification was considered unjustifiable
- 2. The requirements Coffs Harbour Councils Koala Plan of Management (CH KPoM) had not been adequately addressed, Clearly the amount of clearing of mapped Primary koala habitat does not meet the CH KPoM and Council needs to refuse it, otherwise what is the point of a koala Plan of Management at all!
- 3. Loss of Wildlife Corridor. The proposal will sever the east-west corridor connection and reduce the functionality of the north- south corridor A majority of the proposed 50 m 'enhanced' wildlife corridor is currently swamp land, lacking suitable koala feed trees. It will take years if it is possible at all for it to become suitable as a koala migration corridor.
- 4. The inadequate offset proposals.

The BEC and the GKNP Steering committee believe the DA should fall on its failure to meet fundamental planning requirements therefore negating any need to consider proposed biodiversity offsetting proposals.

Having said that a quick look at the "*Platypus junction*" offset proposal is revealing and reflective of the lack of integrity in the DA proposal as a whole.

The intention at "*Platypus junction*" includes:

1 Plant out a minimum of 35 ha of degraded areas

2. 'Creation' of the equivalent of five times the area (6.99 ha) of Primary Koala habitat to be cleared in the proposed development in Lot 2

We tracked down "*Platypus junction* " – not visiting the site as it is private property – but using online recent air photos and maps .What we found was:

- 1. It is at least 7 kms from recognised koala Habitat (OEH hubs mapping)
- 2. It appears to be in a good condition with the forests canopy largely intact there are no apparent degraded areas of any significance and no rehabilitation or replanting needs are apparent.

Alternatively, Lot 2 site adjoins recognised Koala Hub and is within one km of a very high ranked area.

It was clearly mistake when Coffs Harbour City Council included lot 2 in a parcel of Council land it transferred to the Coffs Harbour Ex-services (CEx) Club in exchange for land transferred to Council for the building of the multi education campus a couple of kilometres to the north. The central focus of the land exchange was Council acquiring suitable land for the education campus and the transfer to CEx of high conservation land may have escaped due diligence.

When lot 2 was put up for sale in 2014 planners from Coffs Harbour City Council planning department advised that they considered Lot 2 was only suitable for a maximum of one dwelling entitlement due to the zoning (low density residential) and the environmental

constraints on the land including the endangered ecological community, primary Koala habitat and bushfire risk.

Alternative to the development

There are alternatives to the development.

Potential for acquisition

The Coffs Council has at least two funds an Environmental Levy Fund and a recently established Environmental Trust Fund which could potentially be used for acquisition of high conservation value land such as Lot 2.

The centrepiece of the NSW Governments Koala Strategy is a fund for acquisition of koala habitat and NPWS has land acquisition funds.

Lot 2 could potentially be purchased as compensatory habitat for the impact of the Pacific Highway Coffs Harbour bypass which will have negative impacts on other corridors for the Coffs Harbour koala population.

Coastal Crown Land between Coffs Harbour and Sawtell is managed by Coffs Harbour City Council as a State Park. The NSW national parks Association has expressed interest in the Crown Land becoming part of the proposed Great Koala National Park (2014) see: https://npansw.org/npa/campaigns/great-koala-national-park/the-great-koala-nationalpark-plan/ and more recently in the State Park being upgraded to a Regional Park under the NPW Act.(2018) see: https://npansw.org/wp-content/uploads/2018/08/50-Park-Proposals-NPA-31_1_2018.pdf

Lot 2 if purchased could be incorporated into the State Park and potentially upgraded to a Regional Park as well as being incorporated in the GKNP.

The developer has taken Coffs harbour City Council to Court for 'deemed refusal' for allegedly not making a determination of the DA within the statutory time frame.

A land and Environment Court conciliation process between Council and the developer has recently failed and a Directions Hearing has been set for next Monday 5th August 2019.

It is understood that two possible scenarios at that stage are then likely;

1. If the Proponent requests to pursue the matter in the Land & Environment Court, a hearing date will be set.

The earliest possible date would be February/March 2020 and that case would be heard in Coffs Harbour. It is also possible a different Commissioner may handle the case and would most likely also want to re-visit the site and listen to community objectors.

2. Alternatively the Proponent may lodge an amended Development Application (DA). If this occurs all the new documents will once again be available for viewing and comment.

All objectors should be formally notified of the situation after next Monday 5 August when dates are due to be set.

Legal costs will far exceed the fair value of the land.

Case Study 5. Roses Creek and Scotchman State Forest

Key lessons

- Even further from town and:
 - even sloppier assessment and planning processes,
 - closer to the biological and World Heritage riches of nature,
 - Even greater ignorance of koala populations, and
 - reckless regard for catchment and landscape protection.
- if you don't look you don't see.
- It's up to the community to find and define the biological treasures

Logging of the forests in the headwaters of the Kalang River has been controversial with well attended protest meetings being held recently in Kalang valley and in Bellingen.

The NSW Forestry Corporation's website posting bears little resemblance to what is actually going on in the forests of the Kalang River catchment http://www.forestrycorporation.com.au/our-forests/kalang-river-catchment

As against " *Protecting the health of the Kalang river*..." as claimed on the website, a recent

community audit by the North East Forest Alliance of recent logging in Gladstone State Forest has revealed a failure to implement erosion control measures as required by the Environment Protection Authority and the fisheries licences and subsequent pollution of the waterways leading into the Kalang River.

The Forestry Corporation website correctly claims the Kalang River catchment forests "... are dynamic and diverse and are the home to a vast array of flora and fauna "

and, then incorrectly that :

"professional ecologists survey the wildlife to identify threatened species before harvesting."

A review by the BEC of the pre-logging surveys for four compartments conducted over a period of days, and covering 735 hectares in the Kalang forests, showed that the after approximately one week of survey including targeting 38 threatened fauna species using a range of survey techniques the survey team;

- 1. Observed one threatened fauna species the glossy black cockatoo,
- 2. Heard one arboreal marsupial- the yellow bellied glider,
- 3. recorded 6 koala scats under one tree,
- 4. recorded one threatened plant species, and

5. failed to identify any endangered ecological communities – recent mapping by the EPA has identified approx. 100ha

In contrast to the forest Corporations ecological surveys recent community surveys for koalas undertaken by Kalang River Forest Alliance (KRFA) volunteers across State Forests at the headwaters of the Kalang River have found evidence of a significant viable breeding population of oalas.

Evidence of this population has been found in all four of the native forest compartments that the Forestry Corporation of NSW is proposing to intensively log.

The levels of koala activity recently recorded in the Kalang River headwaters are higher than previously documented anywhere across this landscape.

Koala surveys undertaken by the Forestry Corporation in the same forests identified a single Koala feed tree with 6 scats across many hundreds of hectares of publicly owned State Forest.

The adoption of intensive ground harvesting techniques is despite the fact that the NSW Government earlier admitted in trying to justify cable logging for the area:

"... conventional ground-based harvesting and extraction in these areas would significantly increase the potential for soil erosion and water pollution. http://www.epa.nsw.gov.au/forestagreements/coastIFOAsHarvestingTrial.htm

In addition to recent discovery of a significant local koala colony environmentalists have identified ten reasons not to log the Kalang headwaters forests

- 1. The Forest Corporation does not have a social licence to log the forests.
- 2. The Forest Corporation have not conducted cultural heritage assessments in consultation with local communities.
- 3. The forests are being harvested prematurely and will produce predominantly small and super small logs.
- 4. There is a climate emergency and the forests are more valuable as a carbon store.
- 5. The soils are highly erodible and likely to lead to pollution of the Kalang river and its tributaries. Environmental repair of local soils should be undertaken instead of logging
- 6. The forests are known and predicted habitat for the endangered Rufous Scrub bird a species the United nations has asked Australia to consider giving added protection
- 7. The forest is prime habitat for the endangered Milky silkpod which will be damaged by road openings and logging operations. The species is not being managed in accordance with the IFOA
- 8. The logging operation, harvesting predominantly small and super small logs with excessive long uphill snigs and at the limit of log haul distance to mills is uneconomic .
- 9. The pre-logging flora and fauna surveys are dated and completely inadequate .
- 10. The Forestry Corporation has failed to consider recently listed endangered species as required by the IFOA

As a result environment groups are calling on the Environment Minister, Matt Kean, to intervene to protect the koalas of the Upper Kalang and to create the Great Koala National Park.

End.