

12 December 2016

Ms Danijela Karac  
Director, Planning Frameworks  
NSW Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

Dear Ms Karac,

### **Draft koala habitat protection SEPP**

Port Macquarie-Hastings Council (Council) commends the Department of Planning and Environment (the Department) on its review of the State Environmental Planning Policy 44 – Koala Habitat Protection (the policy). The Port Macquarie-Hastings area is home to more than 2,000 koalas, in at least three genetically distinct populations. They are an inherent part of our local culture and character. A recent petition presented to Council expressed concern at the decline in koala population due to habitat loss and was signed by over 3,000 people. Council is working on a planning strategy and comprehensive koala plan of management to ensure we can safeguard the koala as a social, ecological and economic asset for future generations.

The review of the policy is greatly welcomed by Council. The current policy has had no effect on reversing koala population decline in the two decades it has been in place and left untended. Good outcomes have been hampered by limited, confusing and out of date guidance and a blinkered and inflexible approach to its application that, in our view, is inconsistent with the original intent of the policy. Since its inception, the policy has been overtaken by improved scientific understanding of koala habitat, one example of which is the six-fold expansion of the tree species list in the proposed policy.

There is also now significant practical experience in the application of site and comprehensive koala plans of management. Tapping into this knowledge and experience, mostly held within local government practitioners, can only aid the Department's review and help provide a policy that effectively protects koala habitat.

In the spirit of a joint interest in producing an effective and workable policy to protect koala habitat, Council offers the following comments on the *Explanation of Intended Effect*.

#### **Aim of the SEPP**

Council supports the continuation of the current aim to ensure a permanent free-living population over the present range and reverse the current trend of koala population decline. The weakness of the current policy aim is in its limitation to a narrowly defined 'core koala habitat' once the implicit two-step process to find it is undertaken. In our view, the koala habitat necessary to allow koalas to breed, claim territory and roam for food, in other words a

permanent free-living population, is much greater, sometimes by a factor of more than four times, than the current definition and process allows. This is a fundamental failing in the current policy and must be addressed.

#### *Comprehensive plans*

Clear guidance on the preparation of comprehensive plans of management, and how they differ from a site based approach, is critical. In particular how the assessment of koala habitat is completely different at the site scale from the landscape scale used in preparing a comprehensive plan. This difference cannot be overstated. The process set out by the current policy to determine potential koala habitat is not plausible at the landscape scale. The effort required to survey trees across several thousand hectares is prohibitively expensive and outweighs the likely benefit of this method over thorough vegetation community mapping using other methods, yet the latter does not seem an option under the current policy.

#### *Standardised requirements where no comprehensive plan*

Council cannot make specific comment on this part of the proposal prior to reviewing the detail of the standardised requirements.

### **Application of the SEPP**

Council supports the continuation of the land identified to which the policy applies, in particular Port Macquarie-Hastings Council's inclusion in this list.

### **Definitions**

#### *The concept of core koala habitat*

As mentioned above, in our view the fundamental failing of the current policy is in the limited definition of core koala habitat. Or more correctly, the implicit process in the current policy that must be followed to determine its location.

The area of occupancy of a population of koalas is only a small proportion of the available habitat at any one time. Koala habitat is mostly uninhabited by koalas. Future koala policy needs to deal with dynamic seasonal nature of koala habitat and that natural occupancy rates vary between 10 and 50% at any given time. Occupancy rates are largely driven by soil fertility and rainfall and can also be influenced by stochastic events such as drought, extreme heat waves and fire, and breeding cycles. Assessment of core koala habitat under the current policy grossly underestimates actual habitat needed to sustain a population as the survey is a snap shot in time, omitting unoccupied habitat at the time of survey. In coastal New South Wales, this area of occupancy is nearly always less than 50%, meaning that the policy, at best, ignores half of the koala habitat necessary to achieve the aim of the policy.

#### *Requested addition to the tree species list*

Council supports the expanded list of tree species proposed in the Appendix. We request the addition of *E.racemosa* to this list as it has been identified in our local habitat study as a koala food tree. Alternatively, the department may wish to allow sufficient flexibility in either amending the tree species list or allowing it to be supplemented with a local list based on scientific data as suggested in the *Recovery Plan for the Koala* (Department of Environment & Climate Change NSW, 2008).

## **The development assessment process**

### *Koala presence as indicator of koala habitat*

The principle of considering non-koala habitat as important where it is clearly being used by koalas is supported by Council. As mentioned earlier, the detail of potential requirements in the guidelines remains unknown and we cannot make an informed comment at this stage.

### *The role of comprehensive plans in streamlining development assessment*

Council supports streamlining the development assessment process only where there is sufficient information available on koala habitat to lower the risk of habitat loss or habitat connectivity. The best way to ensure the availability of information is in the preparation of a comprehensive koala plan of management at the landscape scale.

A comprehensive plan can lead to greater certainty for proponents only where there is limited opportunity for challenge. An approved comprehensive plan, prepared with scientific rigour, is sufficient to guide preparation of LEP and DCP planning controls that will apply to any applicable development, without the need to carry out further investigations. This level of certainty removes speculation from the proponent's initial calculations of yield and the pressures and compromises that follow to achieve it.

This certainty can also be used to create an economical and efficient pathway for development applications that comply with the comprehensive plan or the LEP and DCP provisions that follow. This could be a powerful incentive to proponents to design proposals consistent with the design solutions in the koala plan. The wording of the policy in terms of the weight given to a comprehensive plan will be critical in providing this incentive.

A key feature of a landscape approach to koala habitat protection is that it creates an opportunity to resolve issues of compensatory planting outside of the site area, providing the benefit of further improving the development assessment process. A comprehensive plan can identify areas of already compromised habitat that might be removed and the locations suitable to receive offset planting that will strategically reinforce or expand good quality koala habitat or linking areas.

### *Barriers to preparing comprehensive plans*

Under the current policy there is little to no benefit to either councils or proponents of development in preparing a comprehensive koala plan of management. The ecological investigations for potential and core koala habitat must be undertaken regardless of whether a comprehensive landscape approach has previously identified habitat important to the survival of the koala. This duplication of investigations is a waste of resources in both time and money for the proponent and councils and in our experience leads to conflict with council's position, adding to delay and cost.

In our early experience in the preparation of a comprehensive plan and our observations of other councils doing the same, the Environmental Protection Agency (in the context of private native forestry) and the Department's adversarial stance with a narrow interpretation of the current policy, the flawed definition of core koala habitat in particular, has created an additional disincentive to prepare a comprehensive plan under the SEPP. These attitudes must change if comprehensive plans are to succeed as all government stakeholders must commit to achieving the intent of the policy.

### *Site-based requirements*

A key failing of the current policy is that koala plans of management only serve to control or guide development **within** core koala habitat. This inevitably results in a loss of koala habitat or a reduction in its utility and longer term viability due to fragmentation or exposure to edge effects for example. In our view, this is a fundamental error in the protection of koala habitat.

The current practice of site-based plans results in an illusion that koala habitat will be preserved within development sites. This has led to missed opportunities to capture sufficient compensatory planting for habitat that is inevitably lost due to the reality of how subdivision and development occurs over time, with its need for landform modification, trenching and space for construction activity, as well as later removal of trees by homeowners due to safety concerns. The development industry is not to blame for this outcome. The proposed policy must acknowledge the reality of impacts of subdivision, development and ongoing residential use and provide strong guidance to separate incompatible land uses from koala habitat.

Council's koala planning team has formed the view that the best way to prevent further decline in koala populations is to ensure sufficient habitat is retained and connected, as well as reducing koala exposure to human-related risks such as forestry, dog attack and car strike. As such, we are applying the same principles used in the State's recent draft biodiversity legislation and in the first instance are seeking to avoid any development in koala habitat other than that which is demonstrably compatible with the koala. In our view, urban development is incompatible with koala survival.

#### *Habitat linking areas*

Habitat connectivity is also a key component in habitat protection. McAlpine et al (2006) provides a useful approach in determining habitat connectivity. It is essential that site based requirements are able to address and consider the broader context of koala movement between habitat patches.

#### *Other threats to survival*

While removal of habitat is a large component of the survival threat to the koala, other threatening processes must also be considered. For example, a development adjacent to koala habitat, where no habitat is being removed, will increase the risk of predation from dogs and vehicle strike if no mitigating controls are identified and implemented. The scope of the guideline requirements must address these potential impacts.

### **The Guidelines**

We have outlined our key recommendations for effective protection of koala habitat and connectivity and mitigating threats to koalas above and there is no need to repeat them in this section.

We suggest the Department review *Planning Guidelines for Koala Conservation and Recovery* (McAlpine et al, 2006). The guidelines provide a comprehensive planning approach to the protection of koala habitat and habitat connectivity. The guide includes suggestions for planning controls.

A requirement to determine important linking areas for koala habitat protection should be also mandated in the requirements. The method proposed by McAlpine et al (2015) is one such peer reviewed method that could be used.

#### *Survey techniques*

The proposed policy could be informed by formal occupancy modelling across the various habitat types to determine the minimum survey effort required to establish koala presence with a reasonable degree of confidence using regularised grid-based spot assessment technique (RGB-SAT) methodology.

We also recommend the guidelines not unintentionally limit the type of assessment technique by tightly prescribing only one method. This is an area that is improving over time with more field experience and academic research. We know that the RGB-SAT method for example,

while preferred, has its limitations in terms of occupancy, deterioration of scats in areas of high rainfall and humidity, unskilled persons doing the survey largely missing koala scats and low detection rates in areas of high-leaf litter and dense undergrowth.

We suggest the following minimum survey effort to define koala habitat is as follows:

1. Presence of Koala activity using RGB-SAT
2. Reviewing records of generational persistence over the last 20 years using Bionet and local records where available
3. Presence of Koala activity using Spotlighting transects
4. Priority habitat should be then defined on the presence of any preferred koala habitat located within a 500m grid cell that is triggered by any one of criterion 2, 3 or 4 above
5. Habitat linking areas should be then defined based on the process in McAlpine (2006) or similar.

We strongly recommend the guidelines specify a minimum level of experience and training in koala survey and ecology for any consultant assessing koala habitat.

### **Local Planning Directions (under section 117 of the Act)**

Council supports the transfer of zoning requirements in relation to the protection of koala habitat to the Local Planning Directions. However, Council has strong concerns over the weakness and applicability of the environmental zones to protect koala habitat. In particular, E zones are of no effect in preventing private native forestry, a key threat to koala habitat.

Thank you for the opportunity to provide comment on the Explanation of Intended Effect for SEPP 44. Council would like to reiterate its support for the review and looks forward to reviewing the draft policy when available. Should your officers require further information, they should contact Mr Steve Schwartz, Council's Strategic Land Use Planner by email [steve.schwartz@pmhc.nsw.gov.au](mailto:steve.schwartz@pmhc.nsw.gov.au) who will be happy to assist.

Yours sincerely



Matt Rogers  
Director Development & Environment

### **References**

Department of Environment & Climate Change NSW. (2008) *Recovery Plan for the Koala*. Retrieved from <http://www.environment.nsw.gov.au/resources/threatenedspecies/08450krp.pdf>

McAlpine, C, et al (2006). *Guidelines for koala conservation and recovery: a guide to best planning practice*. Retrieved from [https://espace.library.uq.edu.au/view/UQ:124088/mcalpine\\_et\\_al\\_2007.pdf](https://espace.library.uq.edu.au/view/UQ:124088/mcalpine_et_al_2007.pdf)

McAlpine C, et al (2015). *Conserving koalas: A review of the contrasting regional trends, outlooks and policy challenges*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0006320715301130>