

INQUIRY INTO KOALA POPULATIONS AND HABITAT IN NEW SOUTH WALES

Organisation: Campbelltown City Council

Date Received: 2 August 2019

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The Director – Portfolio Committee No. 7
Parliament House
Macquarie Street,
Sydney NSW 2000

Dear Sir/Madam,

Inquiry into koala populations and habitat in New South Wales

Thank you for the opportunity to make a submission to the parliamentary committee inquiry and report on koala populations and habitat in New South Wales.

I am pleased to contribute specialist input directly to the committee, and outline concerns for the future of the koala population in the Greater Macarthur region.

This submission (as attached) has been compiled with the intent to provide the committee with detailed information regarding the effectiveness of existing policy frameworks, from a local government perspective; whilst outlining the specific threats faced by our local koala population. I hope this submission assists the committee in undertaking a thorough and robust inquiry.

If you require any further information, please contact Alexandra Cave, Council's Senior Environmental Officer

Yours sincerely,

Fletcher Rayner
Executive Manager
Urban Release and Engagement

Campbelltown City Council submission to the parliamentary committee on the inquiry into koala populations and habitat in New South Wales

State Environmental Planning Policy 44 – Koala Habitat Protection

The aim of NSW *State Environmental Planning Policy 44 – Koala Habitat Protection* (SEPP44) is to protect koala habitat to ensure a permanent free-living population over the present range, and reverse the current trend of koala population decline.

The legislative intent of the SEPP, however, is considered contradictory in nature (in its practical application) to the very aims and objectives of the SEPP - which is widely considered by the scientific community to be a deficient process for the identification and assessment of koala habitat.

Council provided feedback to the Department of Planning, Industry and Environment (DPIE, the Department) on the proposed amendments to SEPP44 as outlined in the Explanation of Intended Effect (EIE) document prepared under Section 38 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) (March, 2017).

In this regard, Council has written to the Department a number of times over the last two decades to notify the policymakers of the fundamental issues and inadequacies identified in the application of the SEPP, and advocate for changes to be made to ensure that the policy is better aligned with the aims and objectives for which it was drafted.

Key concerns and issues identified with the application of SEPP44 in the Campbelltown Local Government Area (LGA) include:

i. Koala habitat definitions

Practical application of the current koala habitat definitions do not adequately identify areas of koala habitat. There is a strong need to further develop and clarify the koala habitat definitions as further refinement of these definitions could better assist in preventing inaccurate assessments of areas of both potential and core koala habitat.

ii. List of Preferred Koala Food Tree species

The list of Preferred Koala Food Trees (PKFT) species in Schedule 2 of the SEPP is considered inadequate for determining 'potential koala habitat' in the Campbelltown LGA, as a number of the PKFTs that have been identified for the LGA through scientific studies, are not included in this list. Therefore, as the initial 'potential koala habitat' definition has to be met before progressing through the SEPP to the assessment of 'core koala habitat' – there is the likelihood for some areas that constitute 'core koala habitat' that don't pass the preliminary test of 'potential koala habitat' to fall through the gaps, and not be adequately captured in the assessment.

Amendments to the SEPP are required to enable locally significant and diverse areas of core koala habitat to be identified and appropriately protected, as only the ones that meet the food tree species requirements represented by those tree species listed in Schedule 2 are currently afforded protection. An updated list would mean that many feed tree species, and associated habitat important to the survival of koalas at a local level are no longer overlooked.

iii. Development assessment process

Council regularly receives ecological assessments prepared by consultants that have inaccurately interpreted the koala habitat definitions in the SEPP. For example, an applicant

may assess a site as not containing core koala habitat (when in fact it does) due to the ambiguity of the current core koala habitat definition (ie suggesting that the lack of a breeding female on site at the time of survey would indicate that the site is not considered core koala habitat and therefore SEPP44 does not apply).

iv. Lack of targeted surveys undertaken to adequately determine core koala habitat:

Council assesses a large number of development applications in areas of core koala habitat, and consultants use a range of survey techniques in the assessments that are put forth. For example, where a site is found to contain potential koala habitat, further assessments undertaken by the consultant on behalf of the applicant to determine if the site contains core koala habitat employ largely inconsistent and inadequate methodologies (ie in many cases the methodology consists of incidental observations made on site), and not extensive survey such as that outlined in the Guidelines (Part 2) as per the Departments Planning Circular B35 – Koala Habitat Protection.

Inconsistent approach to the development of Individual Koala Plans of Management

Due to the number of properties in the Campbelltown LGA that are greater than 1 hectare, Council receives a high number of Individual Koala Plan of Management (IKPOMS) for review and concurrence. For example, in lieu of an approved CKPOM, Council assesses development applications against the applicability of SEPP44 on a case by case basis. This is increasingly resulting in the requirement for the preparation of IKPOMS for each property where a development and/ or subdivision is proposed. In the last year alone, Council staff have assessed more than 40 development related koala habitat assessments including 12 IKPOMS.

This approach is inefficient for a number of reasons including; inaccurate and varying methodologies used, difficulty in ongoing monitoring, inconsistent vegetation compensation measures, and most significantly the cost and uncertainty incurred by applicants arising from the preparation of these documents. Council staff resources are also expended in managing this process, which also involves seeking concurrence from DPIE.

Concern is raised that current framework may allow inappropriate development in areas of core koala habitat, as well as create inconsistency and perceived bias. As a result it affects the ability for councils to achieve the intended goals and objectives associated with the SEPP.

Drawn out and erroneous approval process for Comprehensive Koala Plans of Management

Council has been working on the development of a CKPOM for the past two decades. In 2015, Council engaged Dr Steve Phillip (Biolink) to undertake a technical review of existing work that had been undertaken and prepare a CKPOM for the Campbelltown LGA, which was submitted to the Department in December 2016 for approval.

Since this time, Council has been subject to significant delays in the Department's approval process, which has involved repeated rounds of review and referrals to a number of sections in the DPIE, the former Office of Environment and Heritage (OEH), and National Parks and Wildlife (NPWS) lasting over 12 months each time.

Over the last four years, Council has acted in good faith by working diligently to address feedback received by the Department and resolve any issues identified in order to finalise the CKPOM in a reasonable timeframe. This has included undertaking additional field work and extensive vegetation analysis which has come at a significant financial cost to Council.

Unfortunately, despite submitting our final CKPOM to DPIE for approval in October 2018, Council is yet to receive advice regarding endorsement of the plan.

We currently understand the CKPOM is now the subject of a further review outside of the original scope with referrals to a number of new teams. The review of the CKPOM should be subject to a reasonable review period and approval process to ensure that it's not vulnerable to scope creep.

Council understands this issue reportedly led to a number of North-coast councils deciding to boycott the Departments approval process; and instead endorsing their koala plans as internal Council policy documents.

Finally, without a CKPOM that has been formally approved by the Department, related mapping such as the OEH's Biodiversity Values Map (BVM) (as described in Clause 7.3(3) of the NSW *Biodiversity Conservation Regulation, 2017*) and RFS 10-50 mapping (Section 7.2 of the 10/50 Code of Practice, 2015) is not being updated.

Planning and design of new urban release areas in core koala habitat

For the last few years, Council has been strongly advocating for the need for improved coordination between State and Local Government agencies to ensure that planning for biodiversity outcomes in areas of koala habitat, such as in the Greater Macarthur Priority Growth Area (GMPGA), are addressed during the strategic planning process. This is supported by a number of Council resolutions, in relation to:

- A requirement for the installation of fauna exclusion fencing, appropriate tunnels and high crossing points, to enable safe access through wildlife corridors as part of future development in Mt Gilead (April, 2017)
- Immediate installation of overpasses and koala exclusion fencing along the current alignment of Appin Road (June, 2017)
- A policy position and principles relating to natural asset corridors (November, 2017)
- The findings of the South Campbelltown Koala Habitat Connectivity Study (Biolink, 2017) which were provided to DoPE, RMS and OEH; reiterating the need to establish east-west natural asset corridors across Appin Road to be supported by wildlife underpasses and overpasses (March, 2018)

To support future growth and service urban development in the Greater Macarthur region, Council recognises that essential infrastructure will be required in the form of new roads or road upgrades, heavy rail lines, utilities and pipelines, with the geographic distribution of the development generally requiring north-south orientated linear infrastructure.

Although Council is aware that the complete avoidance of impacts is not always feasible; new infrastructure projects for the GMPGA, such as the upgrade of Appin Road, offer little in terms of measures to ensure unavoidable impacts to biodiversity values are mitigated.

Connectivity and corridor design is key to future-proofing koala populations in urban land use matrix

Concern is raised that best practice corridor principles and guidelines are not being adopted in the strategic planning process for new development areas.

A study by (McAlpine et al 2006¹) found that the main cause of negative effects of landscape configuration to be a combination of increased habitat isolation and increased hostility of the

¹ McAlpine, CA, Rhodes JR, Callaghan JG, Bowen ME, Lunney D, Mitchell DL, Pullar DV, Possingham HP (2006) The importance of forest area and configuration relative to local habitat factors for conserving forest mammals: A case study of koalas in Queensland, Australia. *Biological Conservation* 132:153-165

matrix with high density roads. This requires that precinct plans for new release areas develop and incorporate evidence-based ecological road and corridor design solutions (eg fauna overpasses and/or underpass structures) to mitigate fragmentation of core koala habitat. A recent study that looked at the physiological stress levels in wild koala sub-populations found that anthropogenic-induced stressors tend to increase the stress levels in wild koalas (Narayan, 2019²). Interestingly, the study also found that koalas living in urban landscapes were less stressed than those in rural areas as long as the city incorporated adequate areas of suitable habitat into the matrix.

The ability for wildlife such as koalas to co-exist with human populations in urban areas depends on our ability to adequately design for, and provide them with the necessary resources, to undertake the basic biological and physiological functions on which their survival depends (such as foraging and social behaviors). Those species that lack access to suitable habitat in urban areas were found to be at a higher risk of extinction.

Furthermore, having to move between fragmented patches of habitat further increases the risk of survival. Land clearing and habitat destruction for infrastructure projects and other urban development are compounding major threats to koalas, such as being hit by vehicles or attacked by dogs.

Best practice principles and mitigation measures used to deal with the issues of habitat fragmentation by major linear infrastructure are widely acknowledged (Van der Ree et al, 2008)³:

- a. Fragmentation is only one of the effects of linear infrastructure
- b. Avoid environmentally sensitive areas
- c. Identify the nature of the issues
- d. Better to connect than fragment
- e. Identify the goals for mitigation (SMART technique)
- f. Design mitigation structures for faunal groups, communities and ecosystem processes
- g. Mitigation structures should be for a wide range of species
- h. Understand conditions and populations adjacent to structures
- i. Use and support targeted research
- j. Monitoring should be an integral part of the construction and management process

These principles should be prioritized to facilitate the integration of conservation planning in new development areas; to ensure the long-term viability of natural asset corridors and future-proofing of koalas and their habitat residing in these corridors networks.

Development of best-practice guidelines for koala sensitive design requirements

Best-practice guidelines and/or standards for koala sensitive urban design requirements are desperately needed to guide current and future development in areas of koala habitat.

Koala mortality can be a direct result of human-induced threats from urbanisation and development. The main threats to koalas from urban development activities include: loss of habitat, habitat fragmentation, vehicle strike (koala injury or death), domestic dog attacks (koala injury or death) and increased prevalence of disease (increased susceptibility to disease due to stress caused by the above-mentioned threats).

² Narayan E (2019) Physiological stress levels in wild koala sub-populations facing anthropogenic induced environmental trauma and disease. *Scientific reports* 9:6031

³ Van Der Ree R, Clarkson DT, Holland K, Gulle N, Budden M (2008) *Review of Mitigation Measures used to deal with the Issue of Habitat Fragmentation by Major Linear Infrastructure*. Report for the Commonwealth Department of Environment, Water, Heritage and the Arts

The development of a set of design guidelines would assist Government in guiding development in areas of core koala habitat in a consistent manner (eg across both local developments and state level developments); and ensure developers consider and incorporate koala friendly design measures into future planning and development activities. The standards should provide design guidance for use by land managers, land-use planners, infrastructure providers and development proponents to determine appropriate measures to help avoid and minimise the impact of development and land-use planning on koala populations.