

2 March 2017

Koala Strategy Submissions
PO Box A290
SYDNEY SOUTH NSW 1232

Dear Sir/Madam,

Re: Public Submissions on Development of NSW Koala Strategy

Staff at the City of Wagga Wagga thank the Office of Environment and Heritage (OEH) for the opportunity to provide input to the development of a whole-of-government NSW koala strategy.

Our comments are detailed on the following pages.

Yours faithfully



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Development of a NSW Koala Strategy

Submission by the City of Wagga Wagga

February 2017

Introduction

In December 2016 the NSW Government issued an invitation to the public to provide guidance on the development of a state-wide NSW Koala Strategy. This invitation was issued in response to the recognition of the importance of the koala as a threatened species and as a national iconic species to the community.

The NSW Chief Scientist & Engineer's Report, "*Report of the Independent Review into the Decline of Koala Populations in Key Areas of NSW*", December 2016, Recommendations propose the development of a whole-of-government NSW koala strategy using the best available science to:

- improve data and mapping;
- improve outcomes for koalas through changes to the planning system and native vegetation regulation;
- investigate models for guiding and encouraging best practice;
- prioritise areas of land for conservation management; and
- develop a series of actions to improve collaboration and information exchange amongst government, researchers, land managers and the community.

In November 2016 the NSW Planning and Environment issued an Explanation of Intended Effect with respect to the Proposed Amendment of the State Environment Planning Policy No. 44 – Koala Habitat Protection (SEPP 44). This proposed amendment to SEPP 44 is concurrent with the development of a NSW Koala Strategy by the NSW Office of Environment and Heritage.

However, some of the proposed amendments in the SEPP 44 will conflict with current legislation and or disadvantage the objectives of the NSW Koala Strategy.

To align with the objectives of the Report by the Chief Scientist our submission outlines the following topics that need to be addressed in the proposed NSW Koala Strategy.

Proposed Amendments to SEPP 44

Supporting documentation for the proposed amendments to SEPP 44 included *A Preliminary Map of the Likelihood of Koala Occurrence in NSW* which is subtitled *For use in Private Native Forestry applications*. The general principles outlined in this document should be applied to all clearing and not just to Private Forestry applications.

Specific Comments relating to the Preliminary Map

- At Section 4.2 Step 2 the document needs to specify the criteria by which management situations permit changing the cut-off values. Without strict specifications for the changing of these values, they will be open to change by *ad hoc* and inconsistent management decisions at the landscape at State scales. Such a management environment would ultimately prove to be detrimental to the objectives of the SEPP 44 and the national Koala Strategy.

- Action Levels that reduce feed trees by certain percentages will ultimately deplete effective habitat across the landscape. Most critically these Actions would eliminate connective habitat corridors and ultimately cause a decline in the overall Koala population.
- In Appendix 2, Map Metadata, it is stated that there is no planned update of the data. This statement is inconsistent with Section 4.2 which discusses situations for collecting extra survey data. However, from a planning perspective, it is essential that the map is automatically updated as additional data are generated from surveys and scientific studies.

Section 2.3 uses static data and fails to incorporate the temporal habitat use by Koalas. As such, the probabilities of Koala occurrence are possibly very much underestimated, especially in areas of scattered populations. Data on the temporal habitat use by Koalas is essential for identifying connectivity of habitats across the landscape. Effective habitat corridors are very important for the species survival, particularly in Koala Management Areas 5, 6 and 7 where Koalas are dispersed throughout the primarily agricultural landscape. Habitat corridors are also vital for population recovery after natural disasters such as disease, fire or drought. In the historical past Koala populations have been decimated by disease along the Murrumbidgee River but the Koala population has not recovered in the 100 years since the disease event (Leitch, M. (1985) *Where the Red Gums Grow*, Oxford Print, Wagga).

Likelihood of Occurrence Map

The likelihood of koalas was calculated for each 10km x 10km grid cell across the state. This mathematical formula may or may not provide a true indication of the ecological or biological importance of the habitats for the Koala. A low likelihood value in a grid cell can occur under four different ecological conditions: (i) The cell contains high quality koala habitat in abundance but for reasons unknown the cell contains a low density of Koalas; (ii) The cell contains high quality habitat but in scattered patches; (iii) The cell contains only low quality habitat; and (iv) Koalas in the cell area are, for reasons unknown, highly mobile and do not form sedentary groups. The stated method for developing the likelihood of occurrence map does not differentiate between the four outcomes for cell values.

In fact the statistical techniques used to develop the likelihood of occurrence map are completely inappropriate techniques for the data stored in the *Atlas of NSW Wildlife* database. The information shown by the likelihood of occurrence map is of spurious ecological relevance. Data mining techniques are the appropriate analysis tools to use on these data and the techniques require calibration against known and accurate survey data. The present likelihood of occurrence map cannot be used for any rational decision making regarding conservation of Koalas.

It is important to be mindful of these limitations to the values for likelihood values when decisions are being based on the likelihood map as its values are currently calculated. This awareness becomes important in the development of a Koala research plan (Recommendation 8, NSW Chief Scientist's Report, December 2016).

Updated Guidelines for SEPP 44

To support the proposed amendment of the SEPP, the Department of Planning and Environment will prepare updated guidelines that clearly:

- set out the requirements for preparing comprehensive plans of management; and
- direct the consistent assessment of development applications.

However, the updated guidelines have not been released for public consultation. These guidelines comprise a critical component of both the SEPP 44 and NSW Koala Strategy and it is essential that the public is provided with adequate time to assess these guidelines.

Conflicts with current legislation

In 2016 the NSW Government made substantial changes to the *Local Land Services Act, 2013* (LLS Act). Significant among these changes was the introduction of three land categories:

- **Category 1 (Exempt Land)** Clearing of native vegetation can occur without approval.
- **Category 2 (Regulated Land)** Clearing of native vegetation can occur in accordance with an allowable activity or code under the LLS Act. Proposed clearing of native vegetation that cannot occur in accordance with an allowable activity or code requires approval under the LLS Act.
- **Excluded Land** The native vegetation regulatory framework does not apply and clearing is regulated under the *Environmental Planning and Assessment Act 1979* and the *Biodiversity Conservation Act 2016*, as well as some other legislation.

State-wide maps are being prepared that show the areas covered by each of these three categories. It is foreseeable that these maps will show extensive areas of the state where patches of vegetation identified as koala habitat (Category 2 land) are isolated by land where clearing can occur without approval (Category 1 land). Any unregulated clearing in these regions would destroy or greatly weaken habitat connectivity between the patches of koala habitat (Category 2 land). Therein lies a direct contradiction to the Recommendation 7 of the Chief Scientist's report stated below.

In the Chief Scientist's report the made eleven recommendations for the improvement of Koala conservation. Recommendation 7 states:

“That Government agencies identify priority areas of land across tenures to target for koala conservation management and threat mitigation.

The Office of Environment and Heritage should work with land managers and agencies with significant land portfolios to apply the likelihood of koala occurrence data systematically (Recommendation 2), the predictive koala habitat map (Recommendation 3) and regional scale threat information to identify priority areas to target for conservation management and threat mitigation. Looking across all land tenures will allow opportunities to be identified where a landscape scale management approach can be implemented that improves connectivity and resilience against priority threats.

This work should:

- identifying parcels of public land that support connectivity and/or are key to managing threats to populations so that they are managed for conservation values;

- identifying parcels of private land that contain koala habitat that can improve connectivity and provide refuge from priority threats and identifying voluntary land management arrangements that would preserve the lands' value to koalas;
- Private land holders should be incentivised to manage their land in ways that benefit the koala through funding mechanisms such as biodiversity stewardship agreements and payments under Saving our Species and Private Land Conservation programs;
- identifying appropriate management arrangements for parcels of public land including through addition to the national parks reserve system or arrangements with Aboriginal Land Councils;
- identifying priority areas of land for restoration; and
- identifying target areas for dog control and other threat mitigation.

The Office of Environment and Heritage should also work with Roads and Maritime Services and councils to identify koala road kill hotspots at a fine scale and determine the feasibility and likely effectiveness of preventive mitigation.”

Of particular importance in Recommendation 7 is the emphasis on identifying priority areas of land for Koala conservation management and the development of connectivity in koala habitat. The connectivity in koala habitat is especially significant in the state Koala Management Areas 4, 5, 6 and 7.

Native Vegetation Clearing and the NSW Koala Strategy

The Wagga Wagga LGA is one LGA where this contradiction may be a substantial problem issue for effective koala habitat conservation.

The Wagga Wagga LGA is at the south-eastern boundary of Koala Management Area 6 – Western Slopes and Plains. During the period 1994-2014 several sightings of Koalas were reported in the Wagga Wagga LGA as well as in the surrounding LGAs (A Preliminary Map of the Likelihood of Koala Occurrence in NSW, Office of Environment and Heritage NSW, December 2014).

The Proposed Amendment to SEPP 44 lists 65 tree species that identify Koala habitat. The Wagga Wagga LGA covers an area of about 488,600ha and 14 of these 65 tree species are widely distributed across the LGA. Native vegetation communities across the Wagga Wagga LGA have been surveyed and mapped (Priday, S. and Mulvaney, M. (2005) *The Native Vegetation and Threatened Species of the City of Wagga Wagga*. Department of Environment and Conservation, Queanbeyan NSW). Based on information reported by Priday and Mulvaney (2005) about **99.75%** of the native vegetation in the LGA is defined as potential Koala habitat, according to the updated definitions of Koala habitat.

Enhancement of the connectivity of koala habitats across the landscape is aligned with the objectives of the national and state *Strategies for Koala Conservation* and the *Recovery Plan for the Koala* (*Phascolarctos cinereus*), 2008, Department of Environment and Climate Change, NSW.

Koala Habitat Plan of Management

The City of Wagga Wagga is a listed council in the proposed amendment of SEPP 44 and through a Local Planning Direction will be instructed to give effect to Koala habitat protection. The proposed guidelines will support councils in the making of comprehensive Plans of Management that will be used to guide development assessments and the impacts on koala habitat. In practical terms the provision of protection of koala habitat protection will necessitate Council's preparation of a comprehensive Plan of Management for the entire LGA because of the extensive native vegetation cover that is defined as potential koala habitat.

For the Wagga Wagga LGA the preparation of a plan of management for the Koala may cost in excess of \$100,000, using costs of previous consultant's work of a similar nature. It is a cost for which council will require external funding sources. Councils of Local Government Areas that have substantial areas of koala habitat may also be similarly financially burdened.

The NSW Koala Strategy needs to include provision for financial assistance to councils for the preparation of koala habitat management plans.

Summary

1. There is an urgent need for the public release of the SEPP 44 guidelines, specifying the requirements for preparing comprehensive plans of management and assessment of development applications.
2. All proposed clearing of native vegetation to be done under provisions of the LLS Act must be regulated to ensure meeting the objectives of the NSW Koala Strategy, particularly with regard to maintaining and enhancing connectivity of koala habitat.
3. Provision of financial assistance to Councils for the development of plans of management for koala conservation needs to be incorporated in the NSW Koala Strategy.
4. The proposed NSW Koala Strategy should include all of the 11 Recommendations contained in the Chief Scientist's Report of December 2016, albeit with adjustments to overcome deficiencies outlined above.
5. The proposed NSW Koala Strategy needs to place special emphasis on the development of koala habitat connectivity corridors in KMAs 4, 5, 6, and 7.
6. Data mining techniques should be used to analyse the historical survey data. The present likelihood of occurrence map has spurious ecological relevance.