



KOALA KOALITION
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BOS.helpdesk@environment.nsw.gov.au DPE-5667 SAI - koala nomination – supporting information

RE: Public display of nomination for koalas in NSW to be recognised as SAI species

Dear Sir/ Madam,

Koala Koalition EcoNetwork Port Stephens (KKEPS) hereby supports the nomination on public display to have koalas recognised as an SAI species, and would like to take the opportunity to provide additional information to support the existing application, particularly with regard to Principle 1: *The impact will cause a further decline of a species or ecological community that is currently observed, estimated, inferred or reasonably suspected to be in a rapid rate of decline.*

The current SAI koala nomination on display identifies a number of key points related to the decline in koala numbers and threats to koala populations, namely the IUCN's recognition in 2009 of the koala's low resilience to climate change, the 2020 NSW Parliamentary Koala Inquiry and its mention that climate change is already impacting koala populations, predicted koala populations pre and post the Black Summer Bushfires, the uplisting of the koala to endangered, and the koala national recovery plan identifying the two key threats as land use change and climate change. ¹

The National Koala Recovery Plan's 2024 Annual report states that the total NSW Government investment in koala recovery since 2021 is approximately \$365 million, but the report's conclusion is grim: ***"While these investments and reforms will have a positive impact over time, this does not arrest the long-term trend of declining koala populations. The state and condition of listed koalas for this report remains poor with the conservation trajectory deteriorating in line with the Threatened Species Scientific Committee listing advice."***²

KKEPS, and many other members of the Recovery Team's Community Consultative Committee, believe that protection and conservation of koala habitat at a landscape level is the only method by which the koala will survive into the future. The continuing existence of dual koala SEPPs for rural and non-rural land, however, prevents updates of the Port Stephens CKPOM Habitat maps which is essential to this task.

There is a plethora of issues within NSW legislation and policies that require addressing, according to the 2023 EDO report 'Protecting Koalas in the Sydney Basin bioregion: Strengthening NSW laws to protect the trees that koalas call home', funded by the Sydney Basin Koala Network, of which two recommendations are relevant to BOS and SAI ³:

- Recommendation 7: Overhaul the NSW Biodiversity Offsets Scheme in line with best practice.

In particular:

- a) Offsets must be designed to improve biodiversity outcomes.*
- b) Biodiversity offsets must only be used as a last resort, after consideration of alternatives to avoid, minimise or mitigate impacts.*

- c) Legislation and policy must set clear limits on the use of offsets.
- d) Offsets must not be available for development or activities that will clear or impact on areas of high environmental values, including important threatened species habitat.
- e) Offsets must be based on genuine 'like for like' principles.
- f) Time lags in securing offsets and gains should be minimised.
- g) Indirect offsets must be strictly limited.
- h) Discounting and exemptions should not be permitted.
- i) Offsetting must achieve benefits in perpetuity.
- j) Offsets must be additional.
- k) Offset arrangements must be transparent and legally enforceable.
- l) Offset frameworks must include monitoring and reporting requirements to track whether gains and improvements are being delivered.
- m) Offset frameworks should build in mechanisms to respond to climate change and stochastic events.

• Recommendation 8: Strengthen the 'serious and irreversible impacts' mechanism to more accurately reflect the principles of ecologically sustainable development.

Specifically:

- a) Reframe the standard as serious 'or' irreversible impacts.
- b) Require the test to be applied objectively, not subjectively (i.e. – not in the opinion of the decision maker).
- c) References to extinction risk should be clarified to refer to an appropriate scale and scope (see Principles applicable to determination of "serious and irreversible impacts on biodiversity values").
- d) Consent authorities should be required to have regard to the precautionary principle and cumulative impacts on threatened species.
- e) Provide specific guidance on the application of serious and irreversible impacts (SAII) to koalas and koala habitat.
- f) The mandatory requirement to refuse development proposals that will have serious and irreversible impacts on biodiversity should be applied to both state significant developments and state significant infrastructure (replacing the current discretionary application of the mechanism).

Biodiversity Assessment Method survey limitations

KKEPs would like to provide additional information for consideration regarding habitat loss and habitat fragmentation, and how the current minimum survey requirements for proposed developments can fall short in providing accurate and detailed information needed to make an evidence-led decision and, more importantly, needed to understand the areas most in need of habitat protection and regeneration to support koalas in their fight to survive as a species.

The 2022 NSW Biodiversity Assessment Method Survey Guide for koalas provides information on the minimum survey types and survey window required by the Biodiversity Assessment Method (BAM) which underpins the Biodiversity Offsets Scheme (BOS) ⁴; the same scheme which was subject to a 2021 Parliamentary Inquiry and found to be ineffective ⁵. Until the BOS is reformed later this year, as per recent announcements ⁶, the minimum survey requirements are as follows:

- Surveys to be conducted at optimal time for koala detection;
- Surveys only to be conducted outside the identified times when there is a documented justifiable reason;
- For impact assessment sites, the species may be assumed present;
- Two standard survey methods should be used; a scat detection method must be paired with a non-scat detection method: Spot Assessment Technique (SAT) or detection dogs together with spotlighting, passive acoustic, or drones. ⁷

As a not-for-profit organisation that regularly reviews development applications that include threatened species/ koala habitat in their study or project sites, KKEPS often sees minimal survey dates, minimal survey methods used and the resulting minimal survey data.

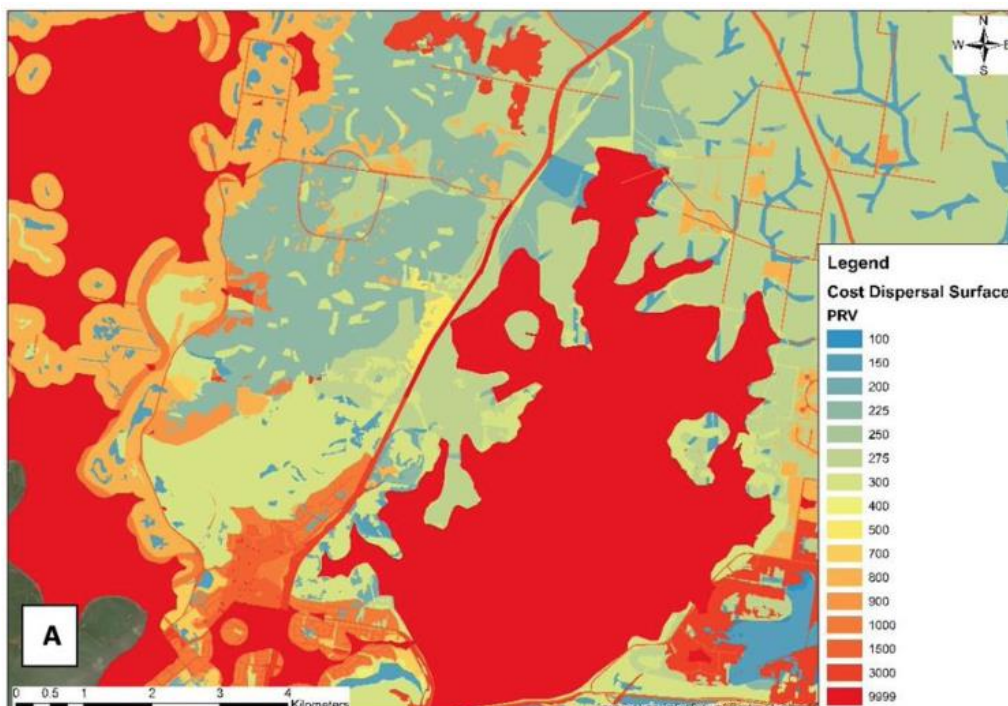
The benefit of additional survey periods and survey methods became very clear when reviewing survey data for applications within the Kings Hill Urban Release Area (NSW). During the consideration phase, additional surveys were undertaken using different survey methods and at different survey times. Although the initial survey provided limited evidence of koalas on site, combined with additional surveys (and survey techniques) the data indicated an actively breeding koala hub and provided an insight into genetic links across the site and the koalas' allelic richness.⁸

KKEPS is of the opinion that the current levels of required data are inadequate to make a decision which could see koala habitat cleared. If Serious and Irreversible Impact (SAIL) status is not applied to koalas, KKEPS recommends that the minimal survey options should be increased to enable a better understanding of the koala home range, their connectivity with other habitats and koala populations and how koalas traverse the area.

In depth surveys/ studies are needed to identify connections, wildlife corridors and dispersal costs and barriers in order to assess the impact of habitat fragmentation and habitat loss.

NSW development assessment statistics for 2022 to 2023 show a 97% pass rate for local DAs and 99% for State Significant Developments.⁹ KKEPS is of the opinion that some otherwise favourable Statement of Environmental Effects (SEE) or Biodiversity Assessment Reports (BDARs) combined with details of economic benefits could be subject to more scrutiny before being approved resulting in yet more habitat clearance and fragmentation. We hope that the State's announced BOS reforms, and the Hon Penny Sharpe MLC quoted as saying "*We cannot ignore the truth: biodiversity in NSW is in crisis*", will see a tighter and more transparent approval process.¹⁰

KKEPS repeatedly asks for cumulative impacts to be taken into account and for impacts to the area surrounding the proposed development footprint to be considered, as many species (including koalas) traverse the wider landscape. One of the many more detailed studies into the koalas present at Kings Hill resulted in the Biolink Koala Habitat Connectivity report in which Biolink identified dispersal costs to koalas within the Kings Hill area and surroundings.¹¹



As explained in the report, “[H]igh cost (increasing from yellow to orange to red) represents a land-use type that is difficult to traverse, lower costs (blues) are easier to traverse. Note that the area is costed for a range of land uses including vegetation type (Preferred Koala Habitat categorisation), agriculture, urban and commercial development, industry, transportation infrastructure and hydrology. The gap-crossing layer is shown in the darkest red, representing areas which exceed 200 m from the nearest mapped vegetation. Parts of the M1 which are fenced with wildlife exclusion fencing are also considered impassable.”¹²

Dispersal cost studies would identify high dispersal cost and low dispersal cost land and could aid any land clearance decisions should SAI status not be granted. The fact that detailed studies such as the Biolink report are not a requirement indicates how the wider picture is not taken into account before approving development applications in a piecemeal fashion. It also indicates that fragmented landscapes are not areas of concern.

More in-depth studies on koala movement and koala genetics would also identify areas where fragmentation is resulting in a decline (or the risk of a potential decline) in allelic richness which could indicate a population that is less likely to adapt to climate change and other environmental stressors. The WWF/ OWAD Environmental report based on sniffer dog findings in various locations in Port Stephens also provided data on the presence of disease and enabled genetic profiling for 39 koalas. The genetic tests revealed that koalas at both “the Tilligerry and Tomaree Peninsulas are now significantly different from those sampled further inland, suggesting that gene flow between peninsula and inland Koalas has been restricted over recent generations”.¹³

The Koala movement data may also help to identify important wildlife corridors and help guide future habitat reconnection and regeneration programmes. The movement data may also support calls to see the expansion of wildlife habitat corridors to a minimum width of 450 metres, a similar width to that recommended by the NSW Chief Scientist for the Cumberland Plain Conservation Plan (CPCP). In recognition that koalas require large and connected areas of habitat to eat, move, and breed, the recommended width at CPCP was an average minimum width of 390-425 metres.¹⁴

The need for SAI status

The cost-dispersal study by Biolink for Campbelltown states “[t]he key to long-term sustainable management of free-ranging koala populations is knowledge. Building on available knowledge indicating and ongoing recovery trend, there is merit in knowing how best to build resilience into the population so that the potential for longer-term population viability can be maximised such that the population is better placed to withstand the impacts of stochastic impacts from catastrophic fire events which have likely played a significant historical role in terms of influencing population distribution and conservation status, the threat now elevated given the future uncertainties associated with climate change. The best way to achieve such resilience will be to have viable population cells widely distributed and occupying habitat outliers that are effectively insulated from large-scale fire events, so enabling recolonization to occur. In order to do this, linkages need to be secured across the landscape.”¹⁵

Our approach may not be as expected, but this submission hopefully demonstrates that decisions are being made with too little information and are potentially resulting in significant and irreversible impacts across the landscape. The SAI status for koalas is pivotal if the planning approval process is not tightened anytime soon. If the SAI status application is unsuccessful, there needs to be a requirement to have far more detailed information in the planning determination/approval process, particularly where koala habitat is threatened with clearance resulting in fragmentation of habitat further isolating extant populations.

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