



Australian
Koala
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A.C.N. 010 922 102

Planning Assessment Commission Public Hearing into the Watermark Coal Project

Submission from the Australian Koala Foundation (AKF) 19 June 2014

Deborah Tabart OAM, Chief Executive Officer

Dr. Douglas Kerlin, Chief Ecologist

On behalf of the Australian Koala Foundation (AKF), we are writing to advise that we have grave concerns regarding the proposed Watermark Coal Project (*Ref: R020/13; SSD-4975*), which will obliterate habitat and move animals to an offset site.

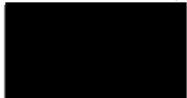
Given the *Vulnerable* status of the Koala in New South Wales, the AKF is against the removal of Koala habitat, particularly in this region of Australia, which is presumed to have an intact Koala population. The Koala is now a federally listed species, and protection of Koala habitat is crucial to efforts to halt Koala declines. Even though this project appears to have benefitted from a controlled action decision while the Minister for the Environment of the day delayed the Koala listing, and while we appreciate that this is not a legal obligation under federal laws, one could argue a project of this size should be showing a moral obligation to not only meet NSW laws but federal laws.

The Gunnedah Koala population represents one of the few remaining significant populations left in New South Wales. It is a population of regional, State and Federal significance. The Federal Government considers Koala Habitat, both located on and adjacent to the proposed development site, as '*habitat critical to the survival of the Koala*' by the definitions contained in the recent '*Draft Referral Guidelines for the Vulnerable Koala*.' A significant 847 ha of Koala Habitat will be directly impacted by the mine works, which while significant in itself, is but a fraction of the Koala Habitat likely to be affected by the indirect impacts of this proposal – noise, dust, edge effects, a reduction in landscape connectivity, increased mortality from trucks and trains associated with the development etc.

There are a myriad of concerns, but for the purpose of this document we will comment on five areas: Koala population estimates, Koala ecology, translocations, offsets, and budget considerations.

Koala Population Estimates:

- We cannot accept the population numbers stated in the Revised KPoM. The proponent's numbers have been generated using an as yet unpublished methodology which has not been subjected to a scientific peer-review process. Insufficient detail has been provided by the proponent to allow us gain an understanding of how these numbers were calculated, so we have no way of assessing whether this methodology is appropriate or statistically and scientifically robust. Indeed we are surprised that Government officers at all levels have allowed these numbers to stand without further details into how these numbers have been generated.





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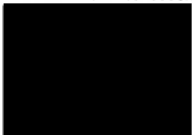
- The AKF currently estimates the Koala population of the greater Gunnedah Local Government Area at only 800-1,300 animals, and this document cites numbers an order of magnitude greater (8,613-16,893; Revised KPoM Section 8.1.4). This is just not possible.
- We have real doubts as to the veracity of the claim that this development will impact '2.1% of the total Koala population within the Gunnedah LGA' (Revised KPoM Executive Summary, S5) – if our estimates for the Gunnedah Koala population are accurate, the proposal could impact as much as 25% of the total Koala population.

Koala ecology:

- The development will have significant impacts on the broader Koala population by interrupting movement of animals across the landscape. This will in turn impact on reproduction within the population – the development will not allow females and males to meet, mate and have offspring. The indirect impacts of this development on the broader Gunnedah Koala population have not been sufficiently explored. Whilst many in Government seek to say that the Gunnedah population is robust, we must remember this population is but one step down from *Endangered* both in NSW and Federal laws.
- We are of the opinion that the impact of this development on Primary Koala Habitat has been significantly understated by the omission of two tree species as preferred Koala tree species in Table 8.1. The Revised KPoM identifies only two preferred Koala trees species in Table 8.1 of the Revised KPoM: *Eucalyptus camaldulensis* and *E. coolabah*. A review of our data for Koala tree species preferences for the area also identifies *E. blakelyi* and *E. dealbata* as preferred Koala tree species for this region (please note that this work has been endorsed by the Federal Government in their 'Draft Referral Guidelines for the Vulnerable Koala'). The proponent has used the AKF's Spot Assessment Technique (SAT) to collect their data with regards to use of the site by Koalas, but has not offered any analysis of the collected data to suggest these two species are not significant for Koalas in the area. In our opinion this could be seen as very shoddy and inaccurate science.
- The Koala survey methodology does not appear to have been applied in a stratified manner. The grid-based survey site selection was clearly driven by the desire to generate population estimates, but has worryingly resulted in a number of habitats that have not been subjected to adequate Koala survey effort (for example the area of 'Tumbledown red Gun Grassy Open Woodland' in the *Additional Offset Area* appears to have no been surveyed at all; the grid based survey methodology means that, if a habitat did not occur at an identified grid point, no surveys were undertaken).

Translocations:

- The AKF is totally opposed to the concept of translocation. It has been ill conceived by industry, and until there a National Policy with robust ethical approvals and oversight in place we will oppose all such translocations. Currently we regard all translocations as dooming the animals involved to death. Whilst some individuals may survive, the population as a whole will slowly become a localized extinction.





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- The project does not appear to comply with NSW National Parks and Wildlife Service Policy and Procedures Statement No. 9: Policy for the Translocation of Threatened Fauna in NSW.
- There is a wealth of evidence to suggest translocations can be associated with significant Koala mortality. To spare the blushes of our scientific colleagues, we will avoid providing specific details in this document but there are many, many examples of translocations gone wrong – in Victoria, translocations with 80%-100% mortality of moved animals (this entire program was subsequently disbanded); in Queensland one study showed up to 30% mortality; another 58% mortality. These are appalling figures, and could be higher still given the level of secrecy which surrounds many of these programs (sometimes call 'research programs, but often conducted to allow unfettered development).
- Some will argue there have been one or two successful translocation exercises (with guidelines that appear to be secret), but we understand they involved moving a handful of animals into high quality, near empty habitats, and presumably had a substantial budget to sustain these animals in their new habitat.
- To suggest that you can move nearly 300 animals with ease is pure nonsense. This is an unprecedented exercise, and to be frank, the groundwork has not yet been done to suggest this will be anything short of a catastrophe.
- Where are these animals going to be moved to? Previous experience has suggested that translocated animals need to be moved to under-utilised if not entirely vacant habitats; moving koalas into already occupied habitats simply results in displaced animals that are more prone to death by car, dog or disease. Yet the Revised KPoM suggests that the only site currently identified will be the proposed *Revised Offset Area 6*, a site which already has a resident koala population according to Figure 11.3 of that same report. We understand there a people in the field at the 11th hour and it is our view that they are panicking about this aspect of the project.
- The other proposed site, the *Additional Offsite Offset Area* does appear to have a number of areas where no Koala activity has been identified. However, we both would argue that if this habitat was capable of supporting more animals, it would already be supporting animals now. Indeed Dr. Kerlin is of the view that, based solely on aerial photography, one could argue much of the identified 'White-box grassy woodland' could be mapped as grassland with isolated trees. Significant replanting will be required to make this area suitable for Koalas, and it will take more than 15-20 plus years for these replanted trees to be sufficiently mature for this site to be suitable for translocated animals. Perhaps the project team can wait until those trees mature?
- The Proposed Translocation Protocols (Revised KPoM Appendix D) are inadequate in a number of respects. The Personnel requirements are vague, guidelines for the selection of new habitat are woefully sparse (with no requirement that release sites be protected), there is no indication as to how many animals will be tracked and no mention of independent oversight and/or reporting. It is embarrassing to read.





- The proponent in this instance is quite severely underestimating the commitment that is being proposed. In our experience many similar projects have started out with the best of intentions, but before too long the proponents realise the whole exercise is costing more than they envisaged and try to end the project prematurely. Even if the AKF was supportive, it is imperative that steps be taken to ensure funding is available for the whole exercise. Then the question is - how much will it cost? Is there any estimate? How long will it be before they start moaning and give it up hoping no-one is watching? The AKF will be watching.

Offsets:

- Let me say upfront, the AKF is totally opposed to the concept of environmental offsets. They sanitise the destruction of our natural capital. Given the current state of Koala populations throughout Australia, there can be no role for offsets in Koala protection.
- A key principle underlying offsets policies at both a NSW and Federal Government level is that offsets should only be applied after efforts to avoid, minimize and mitigate impacts have been included to the greatest extent possible. The proponent has overstated efforts to avoid and minimise impacts. The claim that avoidance measures will ensure '*no disturbance of Breeza State Forest*' (Revised KPoM, Section 11.1) is absurd; a classic case of political convenience overriding ecological fact. Of course there will be a disturbance – obviously the authors are ignoring years of research into fragmentation, edge effects and disturbance ecology. This is also true of the Mt Watermark area. At minimum additional buffer areas should have been provided to give greater protection to these areas; the statement that 'the project achieves the minimum practical Disturbance Boundary whilst still allowing access to an economically viable portion of the minable coal resource' (Page XV of the EIS Main Report) is laughable, more could certainly be done to avoid and minimise impacts. At minimum additional buffering of these habitats should be mandated.
- The Biodiversity Offsets will not protect the biodiversity values of the site:
 - The proposed offsets are pretty underwhelming. More so when you consider that, in practice much of the offset area will not be realised until the completion of the mine and rehabilitation of the mine site; inclusion of these areas has artificially inflated the figures for the proposed offset areas. Additionally, no mechanisms have been proposed to ensure that a pool of money is accrued to pay for this work. Are we simply to take the proponent at their word that this will be completed? How can we be sure these offsets will be achieved, given that rehabilitation works won't even commence for 30 years? We can assure you that we have been to many sites in Australia where promises have never been fulfilled. Once the money has been taken from the ground, the company restructures (or disappears entirely) and the whole project is swept out the door.
 - The site exhibits a range of listed ecological communities, yet the proposed offset calculations and headline figures have bundled this up, and deliberately obscure the fact that the bulk of the offsets (at least those relevant to Koalas) will be 'White Box





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Grassy Woodland'; for communities such as the threatened 'Blakely's Red Gum Grassy Woodland' or 'Inland Grey Box Grassy Woodland' the offsets are non-existent. Consequently it is apparent that the proposals will lead to a diminishing of overall biodiversity. Disturbing a range of differing ecosystems/habitats while attempting to recreate a large area of just a handful of habitats does not protect biodiversity (even if these attempts succeed).

- Mechanisms to protect these offset areas in perpetuity are not sufficient. Recent events in Queensland (concerning the Bimblebox Nature Reserve) have now set a new precedent, demanding that a much higher level of protection than that proposed will be required before the proponent can claim to be able to protect these sites in perpetuity (bear in mind the AKF is totally opposed to this wonderful reserve being destroyed for mining or any other activity).
- We fear in the future we will look back on developments such as this with shame. We have allowed the trees to go down, allowed our Natural world to be destroyed, and we will look at these offsets and find that they have not delivered on their promises, many were nothing more than hot air, and that they have not been able to replace that which we have lost. Please be assured that Offsets are nothing short of the Emperor wearing no clothes.

Budget Considerations:

- As mentioned, in our experience we have seen numerous projects which have started out with the best of intentions, but have come awry due to an underestimate of the costs involved. There are two aspects of the proposal that are of particular concern: the revegetation and rehabilitation works, and the translocation program. Assessment officers cannot possibly judge the value or effectiveness of these measures without being confident that sufficient resources will be available.
- It is impossible to have confidence in any translocation program without far greater details as to the budget available to pay for these measures. Similarly the proponent cannot be under any illusions as to how much such a program will cost. Until a detailed budget is produced and agreed upon, any talk of translocating nearly 300 animals is pure fantasy.
- Given the long-term nature of this proposal, there are obvious means to ensure the proponent fulfills their obligations with regards to conditions etc., but given such a significant portion of the promised offsets will be comprised of the rehabilitated mine sites, when the time comes to undertake this rehabilitation work the proponent will have no incentives to ensure the work is completed in a satisfactory manner. Recreating ecosystems is a complex and fraught task – there is much more to consider than simply planting trees (soils, topography etc.). There is very little evidence, for example, to support claims that paddocks can be rehabilitated into 'White Box Grassy Woodland.' In our experience, most of these replanted areas emerge from 'rehabilitation' programs as little more than sparse wattle dominated forests. It is therefore imperative that, if the proposal does proceed, conditions are in place to ensure that significant monies are set aside to cover rehabilitation





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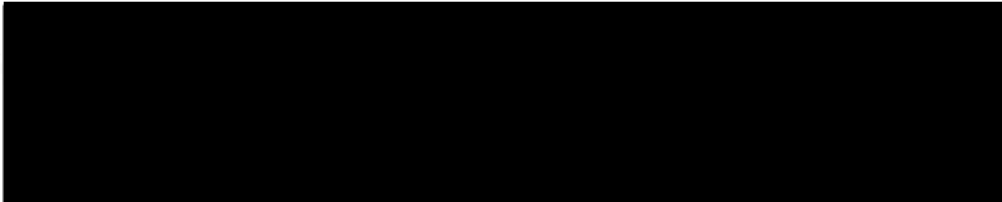
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expenses. The proponent would not like that I am sure, but unless they make this commitment then there are no guarantees of their compliance.

The AKF has had an active interest in the Koalas in the Gunnedah region for more than 15 years. We offered our Koala Habitat Atlas to the then Mayor of Gunnedah Shire Council, Mr. Adam Marshall - without any cost to council - and it was refused. One has to question why good mapping has not been incorporated into any of these decisions (we have attached a copy of this map).

The AKF is extremely concerned about this proposal. The Koala is listed as a threatened species at both the State and Federal levels, and a development of this magnitude will have a dramatic, detrimental impact on what is, at present, one of the few remaining significant Koala populations in NSW. These animals are already at great risk, in particular from drought. If this project goes ahead, the Koalas on this site and surrounds are doomed.

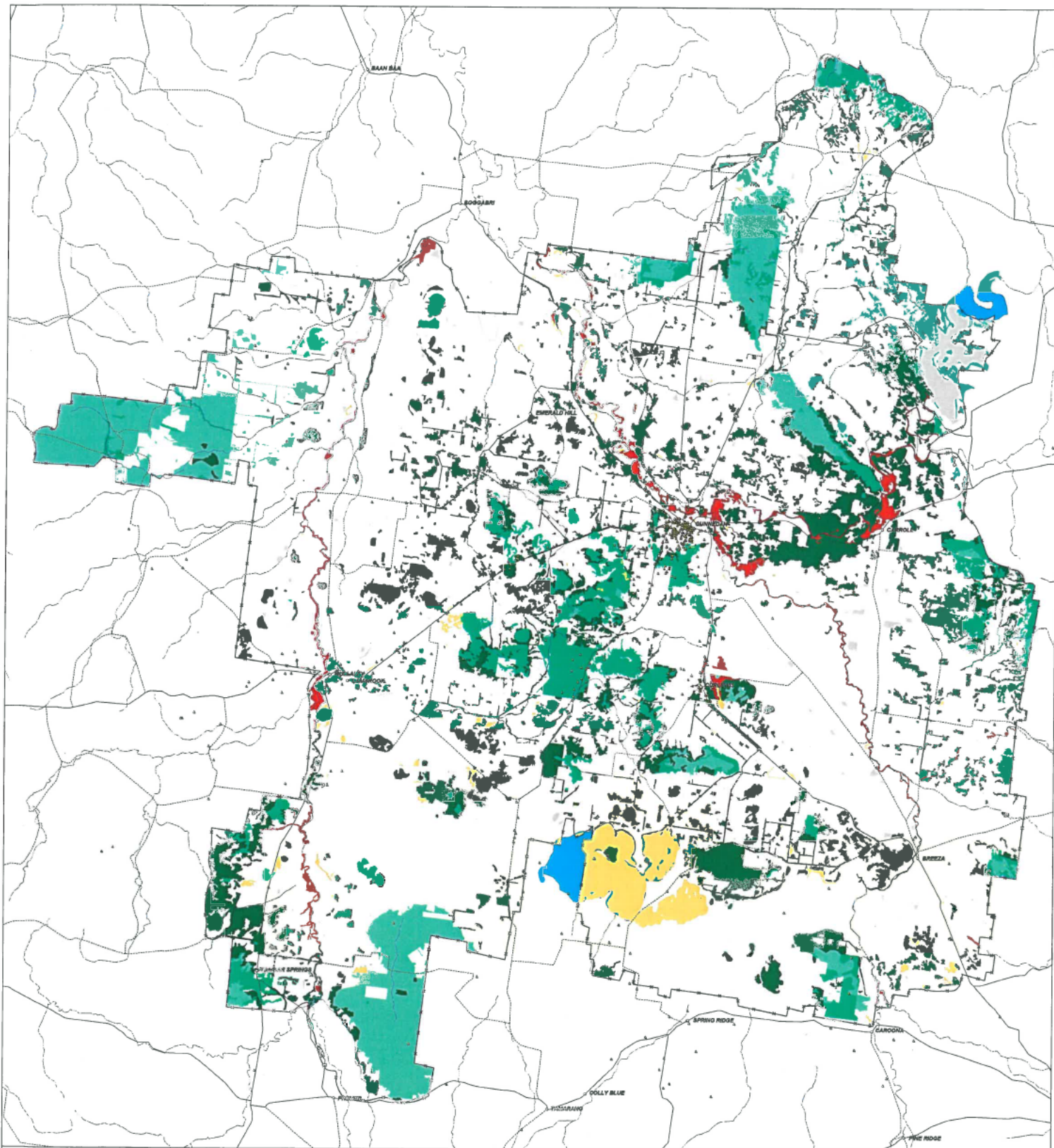
Thank you for your consideration,



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www.savethekoala.com



KOALA HABITAT ATLAS GUNNEDAH LGA

Based on Namoi CMA
vegetation data

0 10 km

- Gunnedah LGA boundary
- 2006 Koala survey records (DEC)

- Habitat categories**
- Primary Habitat 5,798 ha
 - Secondary Habitat (Class A) 57,472 ha
 - Secondary Habitat (Class B) 24,412 ha
 - Secondary Habitat (Class C) 30,982 ha
 - Other vegetation 7,944 ha

This map Copyright AKF 2011
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Road and drainage line data Copyright Geosciences Australia