Submission to the inquiry into the status, health and sustainability of Australia's koala

(Senate Standing Committee on Environment, Communications and the Arts)

February 2011

Friends of Felton Inc. http://www.fof.org.au/

Introduction

The koala (*Phascolarctos cinereus*) is an iconic Australian animal species and, through its appeal internationally, is a major contributor to the tourism industry throughout much of the country, with 75% of overseas visitors indicating a desire to see this species during their stay (Department of the Environment, Water, Heritage and the Arts 2009, Moyal 2008, Jackson 2007). There would be few who would not support efforts for its conservation.

There is considerable debate about the conservation status of the koala throughout its range. In NSW it is listed as vulnerable, although two individual populations are listed as Endangered, with another population at Iluka recorded as reaching extinction during the 1990s (Department of the Environment, Water, Heritage and the Arts 2009). In Queensland it is regarded as a species 'of least concern' except in the SEQ Bioregion, where it is classified as ‘vulnerable’ under the Nature Conservation Act 1992 (Qld) and managed under the *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016* (Qld Government 2006). The Australian and New Zealand Environment and Conservation Council in its National Conservation Strategy (1998) for the koala states that, while *'on a national basis the koala is not threatened with extinction the time to act to ensure that this does not happen, is now*.'

Friends of Felton feels strongly that positive action should be taken to ensure that adequate protection mechanisms are developed to ensure the persistence of populations of this iconic species through into the future. In addition to the known threats, protection and maintenance of known koala habitats will also be vital to ensure against potential future impacts to this species from climate change (Department of the Environment, Water, Heritage and the Arts 2009).

Koalas on the Eastern Darling Downs, southern Queensland

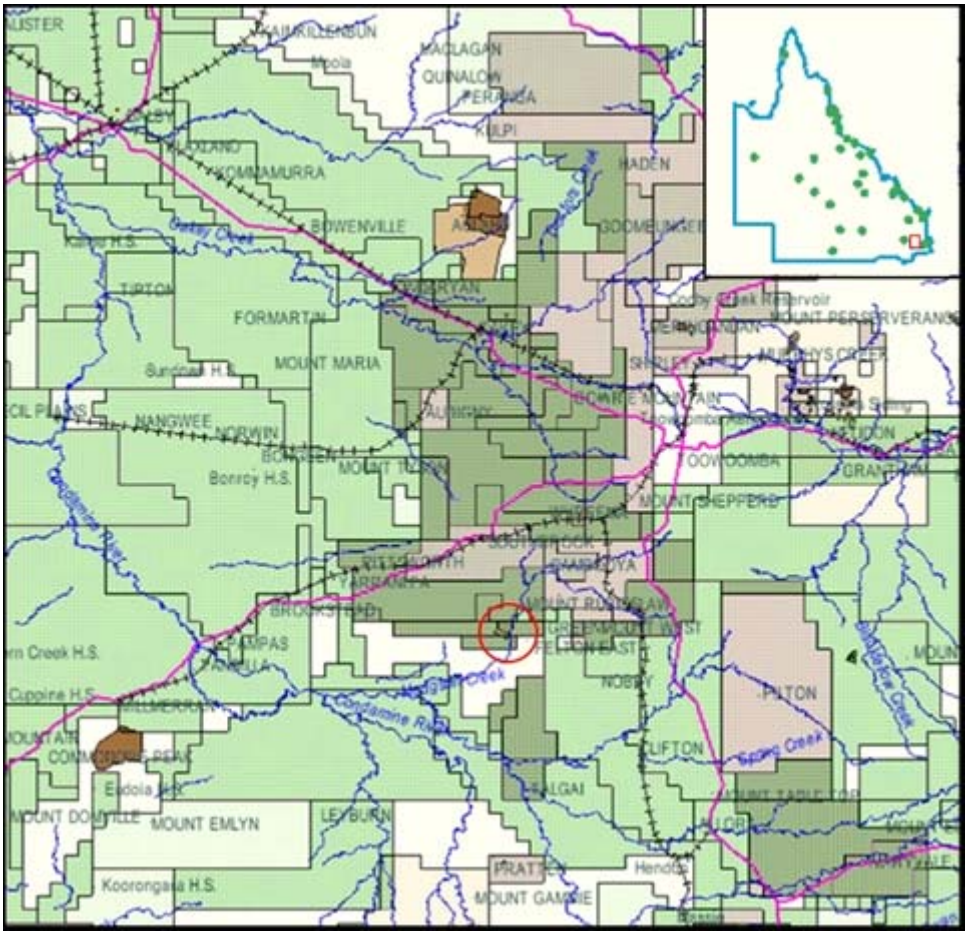
The history of animal extinction or serious population decline is a sad one in Australia since the arrival of Europeans, and the koala is no exception. Indeed, a diversity of threats, including land clearing and habitat fragmentation, has lead to between a 50-90% reduction in this species’ range since European settlement (Qld Government 2006). These threats have impacted koala populations across the region, including the Eastern Darling Downs.

The Eastern Downs population is considered of particular interest, with the fertile soils of the region providing excellent koala habitat and making this a key area for koala conservation (Gordon, pers.comm.). In the broader landscape context, this population, if maintained, may also provide a source for dispersal and, as such, a critical buffer to declining SEQ populations given the geographical location of this region on the inland border of the South East Queensland region.

Within the current Toowoomba Regional council area, koala populations in the former Toowoomba Shire are considered 'vulnerable' and at 'highest threat'; those in the former Crows Nest Shire are at 'moderate to high threat'; and those in the former Cambooya, Clifton, Pittsworth and Jondaryan Shires are presently listed as at 'lowest threat' (Qld Government 2006). Despite these classifications, research undertaken within the Oakey region of the Downs (former Jondaryan Shire) recorded significant population density declines between 1971 and 1997, with one study group (the Berwick population) almost reaching extinction during the study period (Gordon *et al* 1990, Penn *et al.* 2000).

The loss of suitable habitat across the Eastern Darling Downs due to mining development could have serious consequences, pushing koalas below a viable population threshold (Gordon, pers.comm.).

The Eastern Darling Downs is currently covered by multiple mineral exploration leases and/or development applications in various stages of progress through the approvals process (Figure 1). While much of this area is mapped remnant vegetation and subject to clearing restrictions under the Vegetation Management Act, these restrictions are not recognised under, and are generally over-ridden by, the Mineral Resources Act 1989. In addition, to our knowledge, none of the planning legislation adequately addresses the issue of incremental loss of habitat due to the cumulative impact of multiple development approvals. Unless there is adequate protection for habitat areas (and critical linkages between these across the landscape) from such development activity, clearing of remnant vegetation for mining within the district could reach a point where it threatens the survival of koala populations on the eastern Downs (Gordon, pers.comm.).



Source: https://webgis.dme.qld.gov.au/webgis/webqmin/viewer.htm

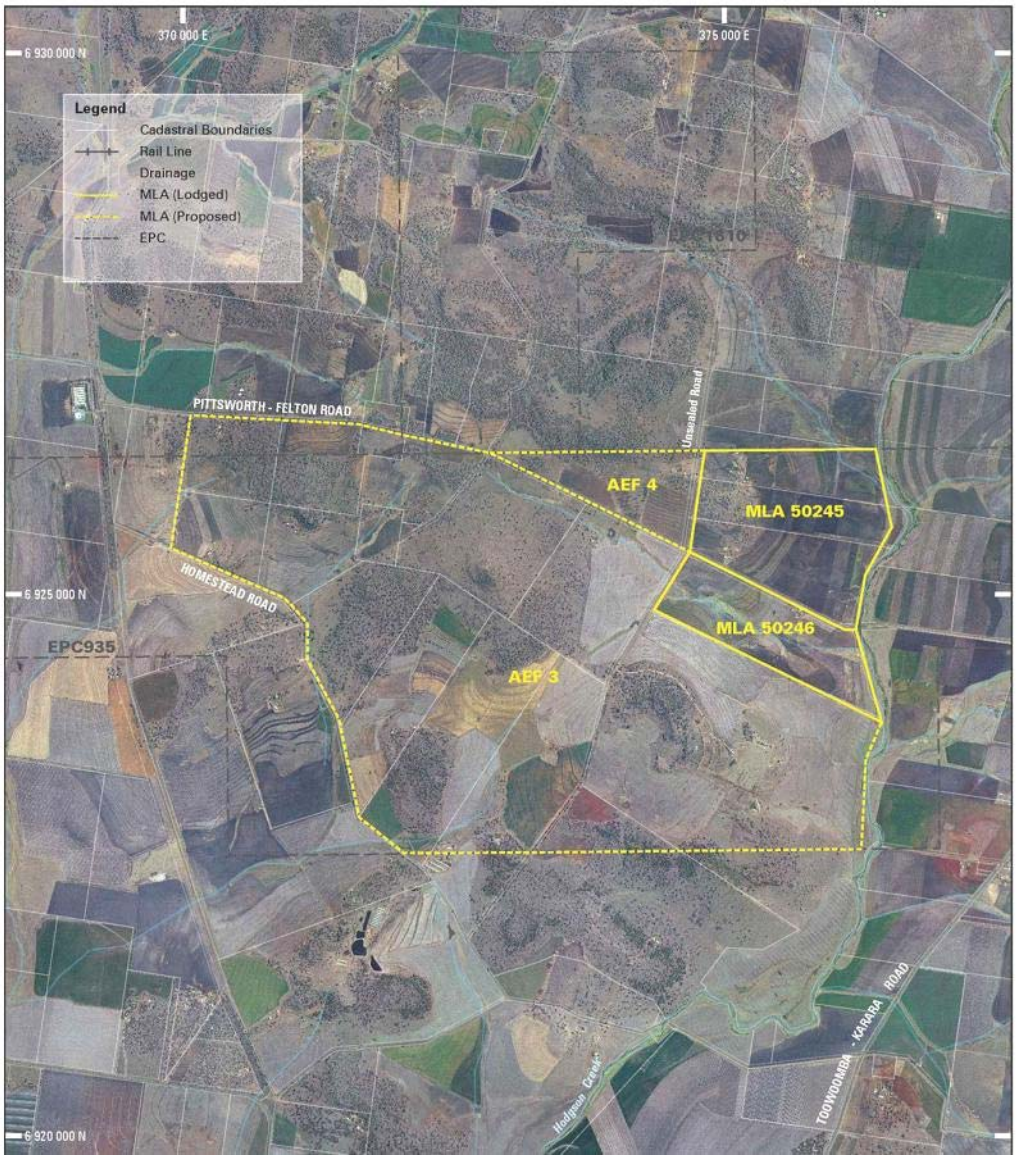
Figure 1: Mining exploration and development leases (all coloured areas) on the Eastern Darling Downs, southern Queensland. The site of the Felton mine lease is indicated by the red circle.

Koalas in the Felton district

In the Felton district, as across much of the Darling Downs, anecdotal evidence from local residents indicate that the koala was once more common in the 20th century than it is now in the 21st. The reason for this decline is unknown to the group, although we are aware of the pressures of disease, habit loss, habitat fragmentation, vehicle accidents and impacts of predation from both feral and domestic animals, inflicted on this species.

Friends of Felton is concerned that a 2000 ha proposed open-cut mining development in the Felton area (Figure 2), which will entail wholesale clearing of koala habitat contained within

patches of remnant vegetation (Figure 3), will place further pressure on the koala population of the Eastern Darling Downs. Loss of habitat is almost universally the reason that animal populations are seriously diminished or pushed to extinction (Gordon *et al*.2006). This concurs with the National Koala Conservation and Management Strategy 2009-2014 (Department of the Environment, Water, Heritage and the Arts 2009), which identifies '*landscape-scale protection of known koala habitat*' as the most effective method of koala conservation.



Adapted from: http://ambreenergy.com/assets/files/ambreCTL_IAS_03082010.pdf

Figure 2: Proposed Felton AmbreCTL mining development area (indicated in yellow).

Figure 3: Mapped Regional Ecosystem remnants (coloured by conservation status) within the Felton Valley area, showing an area designated 'essential habitat' for koalas (central circular hatched area). The earlier (2008) Ambre Energy proposed 'clean coal' pilot project mining area (now superceded and expanded, see Figure 2) is indicated in black.

In a recent survey by 20 volunteers (including people experienced in biodiversity surveys) within and adjacent to the proposed AmbreCTL mine site, two (2) koalas were sighted, and signs of koala presence, including scratches and scats (Triggs 2004), were identified (although at relatively low frequency) within the search area; a third koala was sighted 9 km to the north of the proposed site. In the Felton district, the koala is generally found in forest red gum

(*Eucalyptus tereticornis*), a favoured browse tree for this species, but is also known to utilise mountain coolibah (*Eucalyptus orgadophila*), poplar box (*Eucalyptus populnea*) and narrow-leaved red ironbark (*Eucalyptus crebra*). The remnant vegetation at the proposed mine site is dominated by mountain coolibah, interspersed with pockets of forest red gum and narrow-leaved red ironbark on the Basaltic Uplands, and poplar box woodlands on the Walloon Sandstones; both communities contain vital koala habitat within this historically modified landscape.

Friends of Felton's concern for koalas is part of a wider concern about the impact of mining on the Felton environment and their protection adds to the list of benefits accrued to the community of not following the coal mining option, which include:

protecting a prime agricultural region;
protecting a thriving rural community;
avoiding pollution, including emission of greenhouse gases; and
moving to a renewable energy future.

Legislation

Friends of Felton believes that impacts on koala population present within proposed mine site development areas should be referrable to the Commonwealth Government under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999, as part of its assessment of a project. Currently, the EPBC Act 1999 provides no mechanisms for the impacts of mining on the koala to be considered because the species is not listed as threatened and often, as in the case of Felton, nor are the vegetation communities. Nor does the EPBC Act 1999 adequately address the issue of cumulative impacts on species of incremental habitat (and population) loss and degrading habitat condition. An animal species should not be pushed to threatened status before being covered by the EPBC Act 1999.

Friends of Felton is also concerned that existing state and local government regulations do not sufficiently consider koalas when making decisions on proposals within known habitat areas. Presently, the koala is not listed in the Nature Conservation Act 1994 within the Brigalow Belt Bioregion and therefore the government has no role in considering the impact of activities on koala populations through this legislation. It is only the *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016* (Qld Government

2006) that covers koalas in SEQ that affords this species any form of protection within Queensland. However, the short term (0-10 years) desired outcomes within the National Koala Conservation and Management Strategy 2009-2014 (Department of the Environment, Water, Heritage and the Arts 2009), states a need for: "*Increased consideration of koala habitat demonstrated in development planning*" throughout the species' range.

A deficiency in the Queensland Vegetation Management Act 1999 (VMA) is that vegetation communities that are key habitat for koalas within the Felton district are listed as 'not of concern'. The VMA is the Queensland legislation that is best placed to ensure protection of habitat, yet it so structured (being based on the mapped extent of regional ecosystem types) that there is no mechanism for consideration of the impacts of clearing and/or habitat degradation due to fragmentation and/or management on animal species such as koalas.

National Koala Conservation and Management Strategy 2009-2014

Many of the comments made above are mirrored in the recently released National Koala Conservation and Management Strategy 2009-2014. However, the key point that needs to be made is the process. The National Koala Conservation and Management Strategy 2009-2014 seeks to map key areas for koalas and then to take measures to ensure these are given proper protection in planning decisions. This is commendable. However reliance on a prescriptive mapping method means that known populations outside of those areas may not be considered. Other approaches are needed. The key one is that, in any development proposal, koalas need to be considered. Any proposed development area needs to be surveyed for koalas (including signs of their presence) and relevant authorities need to consider the impacts on koalas, in conjunction with other 'at risk' species, along the lines of the suggested multi-species view contained in the National Koala Conservation and Management Strategy 2009-2014.

In the case of the proposed Felton coal mine, this means that the impact on koalas would be required to be considered by the Commonwealth under the EPBC Act 1999 and by the Queensland Government under the Nature Conservation Act 1994. It is suggested that in both of these Acts, the relevant Minister(s) should be required to ensure the aims of the National Koala Conservation and Management Strategy 2009-2014 are met, which is to 'conserve koalas by retaining viable populations in the wild throughout their natural range' and to avoid the koala becoming a threatened species either locally or nationally.

As the Conservation Strategy is now framed it is possible (and probable) that adverse impacts on koala population will escape the attention of decision makers.

References:

Department of the Environment, Water, Heritage and the Arts (2009). *National Koala Conservation and Management Strategy 2009-2014*. Canberra, ACT

Gordon, G., McGreevy, D.G. and Lawrie, B.C. (1988). Koala Populations in Queensland: Major limiting factors. In *Biology of the Koala*, Surrey Beatty and Sons, Chipping Norton, NSW

Gordon, G., Hrdina, F. and Patterson, R. (2006). Decline in the distribution of the koala (*Phascolarctos cinereus*) in Queensland. *Australian Zoologist* **33** (3),

Jackson, S. (2007). *Koala: origins of an icon.* Jacana Books and Allen & Unwin.

Moyal, A. (2008). *Koala: a historical biography.* CSIRO Publishing.

Penn, A.M., Sherwin, W.B., Gordon, G.., Lunney, D., Melzer, A., and Lacy, R.C. (2000). Demographic forecasting in koala conservation. *Conservation Biology* **14** (3), 629-638.

Queensland Government (2006). *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006016*. Brisbane, Qld.

Triggs, B. (2004). *Tracks, scats and other traces – a field guide to Australian mammals*. Revised edition. Oxford University Press.