

Assessment of Significance of Impact Koala *Phascolarctos cinereus*

An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of a population
- reduce the area of occupancy of the species
- fragment an existing population into two or more populations
- adversely affect habitat critical to the survival of a species
- disrupt the breeding cycle of a population
- modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
- result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat
- introduce disease that may cause the species to decline, or
- interfere with the recovery of the species.

Koalas are listed as Endangered under the EPBC Act. In the area surrounding Cockilgil, two koalas have been recorded within 20km within the last three koala generations (18 years). Suitable koala-use trees occur in the area to be cleared (*Eucalyptus coolabah*, *Casuarina cristata*). Suitable koala-use trees occur within the proposed offset area (*Eucalyptus coolabah*, *Eucalyptus camaldulensis*, *Casuarina cristata*). No koalas were detected on the property during intensive vegetation surveys. If koalas are using the area to be cleared, it will be as occasional feeding area or to move between feeding areas. No breeding population is present in the clearing area (as defined by NSW Government Koala State Environment Planning Policy (2021)).

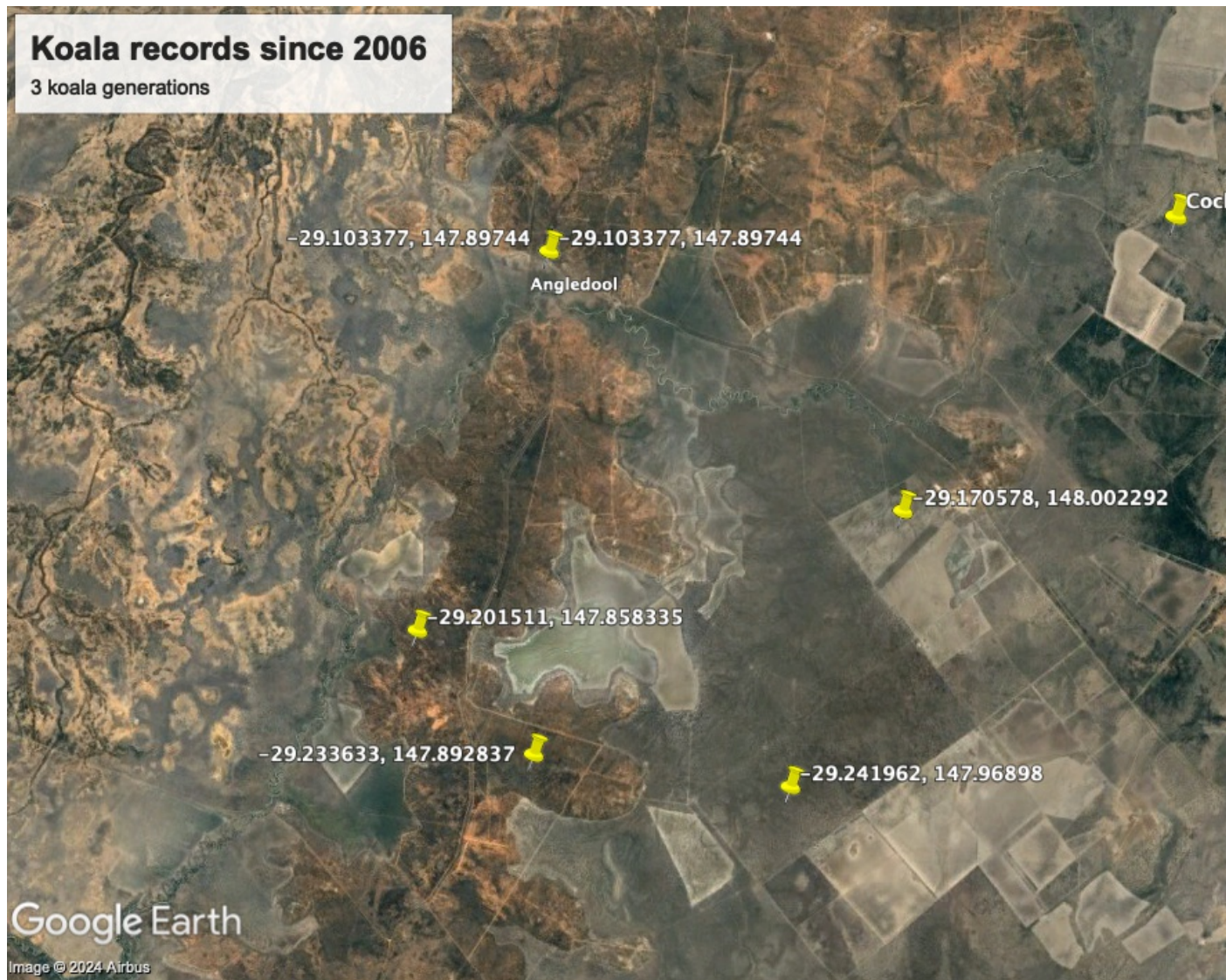


Figure 1 Koala records since 2006 and within 50km of project area.

Lead to a long-term decrease in the size of a population

The area to be cleared is small compared to the suitable habitat within the property and the district. Koalas in this region are likely to have very large home ranges, so will be able to continue to access suitable habitat and no long-term population decrease will result.

Reduce the area of occupancy of the species

Occupancy of the area to be cleared will be occasional and rare, with only a small part of the cleared area supporting food trees (*E. coolabah*). A significant area of suitable habitat will be retained and protected under the offset proposed.

Fragment an existing population into two or more populations

Connectivity between the preferred habitat adjacent to the Narran River and the better quality Coolibah habitat will be maintained within the proposed offset, which also links to the retained vegetation on the eastern side of the property.

Adversely affect habitat critical to the survival of a species

As described earlier, the habitat to be cleared is not critical to the survival of the local population of koalas.

Disrupt the breeding cycle of a population

While koalas may occasionally use the area to be cleared, there is no evidence that the site supports a breeding population of koalas. Koalas are more likely to aggregate and breed, in better habitat along the Narran River and its floodplain.

Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.

The habitat that will be destroyed by the clearing, is only a part of the total clearing area. Enough habitat will remain, both on the property and in the district, to continue to support the sparse population that currently exists. The better-quality habitat will be retained and protected within the proposed offset.

Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat

The clearing will not increase the chances of koala predators (wild dogs) becoming established and affecting koalas to a greater extent.

Introduce disease that may cause the species to decline

Chlamydia is the main disease affecting koala populations in the wild at present. It is spread by contact between affected koalas, usually during mating. The proposed clearing will have no impact on the spread of Chlamydia within populations in the area.

Interfere with the recovery of the species

Given the scale of the clearing in relation to the availability of suitable habitat in the district, the proposed clearing will have a negligible impact on the recovery of koalas in the area, given that the main impact will be climate change and more-frequent droughts.