Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill 2021 Submission 5



30 September 2022

Committee Secretary Senate Standing Committees on Environment and Communications PO Box 6100 Parliament House CANBERRA ACT 2600

Via email: ec.sen@aph.gov.au

Dear Secretary,

## RE: Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill 2021 Senate Inquiry

Sentient is pleased to have the opportunity to provide a submission to the Senate Standing Committees on Environment and Communications for the inquiry into the Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill (Save the Koala Bill).

Sentient supports the amendments proposed in this Bill to introduce a moratorium on clearing koala habitat to provide improved protection for koalas. The reasons for our support which include animal welfare impacts and climate change considerations are described below. In addition, Sentient also acknowledges the key threat posed by land clearing to koala populations on the east coast as stated in the <u>National Recovery Plan for the Koala Phascolarctos cinereus</u> (combined populations of Queensland, New South Wales and the Australian Capital Territory (2022).

## Animal welfare

Sentient acknowledges the significant welfare impacts of land clearing on native animals in addition to the negative conservation impacts. Finn and Stephens (2017) describes these impacts which include pain and distress associated with deaths caused by direct physical trauma as well as ongoing negative animal welfare impacts associated with injuries sustained and destruction of habitat leading to lack of shelter (for protection from predation and adverse environmental conditions) and food resources or challenges posed by the new environment they are displaced to. Specific impacts in addition to traumatic injury and pain compiled from several published papers include shock, dehydration, disease, predation, nutritional disease, misadventure, exertional myopathy. As part of the moratorium, Sentient urges that a comprehensive review of animal welfare impacts prior to any proposed land clearing be undertaken as part of any future approval process.

Although this Bill relates to koalas, we also raise the issue of the management of kangaroos in peri-urban areas who are negatively impacted by land clearing for development and/or road construction. This issue occurs across Australia at the local community level and to date, very little has been done by governments to mitigate the significant welfare impacts caused. Insufficient planning has been a major obstacle to achieving a humane, ethical and effective solution with shooting often used to resolve this issue. There is an increasing community expectation that our native species are valued, respected and protected, irrespective of their conservation status. We urge this committee to consider this issue. Please refer to the following article which provides an informative overview of this issue.

What are the welfare issues with managing peri-urban kangaroos? - RSPCA Knowledgebase

### Climate change

Land clearing threatens biodiversity and impairs the function of terrestrial ecosystems. Land clearing affects regional climates leading to hotter, drier climates. Run off from land clearing results in both nutrient and sediment enrichment, damaging marine ecosystems (Reside et al 2017). It also generates coarse woody debris (CWD). This debris will ultimately become atmospheric carbon dioxide. In Queensland, the CWD generated by land clearing typically takes 38 years to disappear. This ultimately

#### Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill 2021 Submission 5



implies that a key assumption of Australia's current official greenhouse gas reporting (i.e. that 98% of CWD is burned soon after a clearing event) does not adequately account for delayed carbon dioxide emissions (Pringle et al 2021).

A study by Deo (2011) reported that the loss of native vegetation has significantly contributed to increases in mean surface temperature and decreases in regional rainfall. It is well documented that land clearing consequentially increases the number of dry hot days and increases the duration of droughts. This is especially pertinent across regional southeast Australia (Deo et al 2009).

The combined impact of greenhouse gases on climate, coupled with land-surface feedbacks from loss of forests can pose significant risks to our natural resources, biodiversity, animal welfare and human health (IPCC, 2021). The impact of anthropogenic climate change on comfort zones of marine and natural biodiversity could further diminish the resilience of natural ecosystems (IPCC, 2022). The future risks for the resilience of Australia's wildlife, agriculture and environmental resources is highly impacted by land clearing.

We support the regulation of land clearing and, where possible ask for measures to be put in place to actively explore reforestation options. The potential benefits would not only help tackle carbon targets in the long term, but also ensure Australia's biodiversity and the welfare of animals is protected. It should also be noted that Narisma and Pitman (2006) conducted a study to check whether any possible scenarios for land clearing could moderate or amplify CO2 -induced changes in the Australian climate. Results showed that reforestation had the potential to reduce the projected temperature increase for 2050 and 2100 by as much as 40% and 20%, respectively. This cooling effect was highly localised in regions of reforestation only, suggesting that the potential of reforestation to mitigate the impact of global warming may be limited to the spatial scale of reforestation, however resulting impacts are positive.

# Summary

Sentient urges the committee to consider animal welfare risks posed by land clearing, in addition to conservation aspects relating to this Bill as these are equally important.

## Contact: Dr Rosemary Elliott, President

## References

Deo RC (2011) Links between native forest and climate in Australia. Weather 66(3).

Deo RC, McAlpine CA, Syktus JI, Lawrence PJ, McGowan HA, Phinn SR (2009) Impacts of land cover change on daily indices of climate extremes including droughts in eastern Australia. Geophys. Res. Lett. 36(L08705): doi:10.1029/2009GL03766

Finn HC, Stephens NS (2017) The invisible harm: land clearing is an issue of animal welfare. Wildlife Research <u>http://dx.doi.org/10.1071/WR17018</u>

IPCC (2021) Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In press, doi:10.1017/9781009157896.

IPCC (2022) Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change Cambridge University Press. In Press.

Narisma GT, Pitman AJ. (2006) Exploring the sensitivity of the Australian climate to regional land-coverchange scenarios under increasing CO2 concentrations and warmer temperatures. Earth Interactions 10(7): 1-27.

Pringle MJ, Bray SG, Carter JO (2021) Modelling the disappearance of coarse woody debris, following a land clearing event. Carbon Balance and Management 16 (36) <u>https://doi.org/10.1186/s13021-021-00199-y</u> Reside AE, Beher J, Cosgrove AJ et al (2017) Ecological consequences of land clearing and policy reform in Queensland. Pacific Conservation Biology 23(3) 219-230. <u>https://doi.org/10.1071/PC17001</u>