



**Arid
Lands
Environment
Centre**

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Tandyidgee Station ‘Application to Clear Pastoral Land’

The Arid Lands Environment Centre (ALEC) is Central Australia’s peak community environmental organisation that has been advocating for the protection of nature and growing sustainable communities in the arid lands since 1980. ALEC actively contributes to the development of pastoral and biodiversity policy through regulatory reform, written submissions, community education and advocacy. ALEC has had a long engagement with the pastoral estate and biodiversity issues, including around pastoral diversification, weeds, fire and threatened species.

ALEC welcomes the opportunity to provide comment to the Pastoral Lands Board (PLB) on Consolidated Pastoral Company Pty Ltd ‘Application to Clear Pastoral Land’ (Land Clearing Application). Unfortunately due to the timing of the submission, ALEC’s submission is brief.

1. Background and overview

The proponent proposes to clear 4977.3ha of native vegetation within the Mitchell Grass Downs Bioregion for non-irrigated forage sorghum production.

a. Bioregion and soils

The Mitchell Grass Downs bioregion is estimated to be 92,680km², where 97% of the bioregion in the Northern Territory is based under pastoral lease and are already subject to grazing pressure¹. There is limited protected areas within the Mitchell Grass Bioregion, where:

‘There are three small protected areas within the bioregion with a total area of 556km² (0.6% of the bioregion area) although only Connell’s Lagoon Conservation Reserve is managed as an IUCN category I-IV reserve: the two other reserves are exposed to continual or intermittent grazing pressure from livestock. These reserves incorporate samples of only 6 of the 26 described vegetation types within the bioregion, and do not represent some vegetation types that are largely restricted to the bioregion. The reserve system is also inadequate in the representation of threatened species and significant wetlands occurring in the bioregion’²

The Mitchell Grass Bioregion only occurs in the Northern Territory and Queensland. Twenty years ago, it was understood that land condition in Queensland is in a far poorer state than in the Northern Territory³.

Mitchell Grass Plains are dominated by brown vertosols (self-mulching cracking clay or

¹ Fisher, A, Baker, B, Woinarski, J, 2002. ‘Mitchell Grass Downs, Northern Territory: Biodiversity Audit - bioregional case study’.

² Ibid, p.ii.

³ Ibid, p.i.

“black soil”.

‘Mitchell grasses are deeply-rooted, long-lived, perennial grasses; individual tussocks are typically 50-60cm tall (although flowering stems of *A. squarrosa* may be 1.5m) and have a leafy crown 30-60cm in diameter’⁴.

Grasslands are the ‘most threatened and least protected biome’⁵. According to the International Union for Conservation of Nature (IUCN), the most significant threat to grasslands is human land use, especially agriculture and mining.

b. Threatened species and ecological communities

The region threatens 14 different species under the *Territory Parks and Wildlife Conservation Act 1976* (TPWC) and 13 different species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC). This includes an array of different categories, including critically endangered, endangered and vulnerable. Eight species have been identified within the ‘in geature area’, while the others have been identified within the buffer area only. Table 1 identifies the threatened species that may be impacted by the development.

c. Climate and ecosystem health

This region is in the semi-arid zone, where Newcastle Water to the north received 480mm of median rainfall⁶⁷. This region is included in other leading texts on Australia’s arid and semi-arid regions⁸. In addition, this region is identified as part of Australian rangelands, which are ‘areas where the rainfall is too low or unreliable and the soils too poor to support regular cropping. They cover about 80% of Australia and include savannas, woodlands, shrublands, grasslands and wetlands’⁹. In this context it is important to consider the state of these environments.

The health of the arid and semi-arid land environments continues to be in decline. Land use change is a major contributor to arid and semi arid systems undergoing environmental collapse¹⁰. Collapse is understood as an ecosystem which has undergone as ‘a change from a baseline state beyond the point where an ecosystem has lost key defining features and functions and is characterised by declining spatial extent, increased environmental degradation, decreases in, or loss of, key species, disruption of biotic processes, and ultimately loss of ecosystem services and functions’¹¹. The collapse of the arid land environment should cause significant concern for the PLB. The Act is clear in s 4(b) that the PLB has a duty to minimise degradation of the land, rehabilitate land in cases of degradation

⁴ Fisher, A, Baker, B, Woinarski, J, 2002, p.4. ‘Mitchell Grass Downs, Northern Territory: Biodiversity Audit - bioregional case study’.

⁵ Scholtz, R. and Twidwell, D., 2022. The last continuous grasslands on Earth: Identification and conservation importance. *Conservation Science and Practice*, 4(3), p.e626.

⁶ Bom, 2022. ‘Climate Statistics for Australia locations: NEwcastle Waters Post Office’.

⁷ Fisher, A, Baker, B, Woinarski, J, 2002. ‘Mitchell Grass Downs, Northern Territory: Biodiversity Audit - bioregional case study’.

⁸ Morton, S, 2022. ‘Ausralian Deserts: ecology and landscapes’

⁹ Department of Climate Change, Energy, the Environment adn Water. ‘Australian Collaborative Rangelands Information System. Accessed: 9th September 2022.

¹⁰ Bergstrom, D.M., Wienecke, B.C., van den Hoff, J., Hughes, L., Lindenmayer, D.B., Ainsworth, T.D., Baker, C.M., Bland, L., Bowman, D.M., Brooks, S.T. and Canadell, J.G., 2021. Combating ecosystem collapse from the tropics to the Antarctic. *Global change biology*, 27(9), pp.1692-1703.

¹¹ Ibid, p.1693.

Table 1: Threatened species identified that may be impacted by the proposed land clearing application

<u>Common Name</u>	<u>Species</u>	<u>TPWC</u>	<u>EPBC</u>	<u>Location</u>
Curlew Sandpiper	<i>Calidris ferrunginea</i>	Critically endangered	Critically endangered	In feature area
Red Goshawk	<i>Erythroricis radiatus</i>	Vulnerable	Vulnerable	In feature area
Gouldian Finch	<i>Erythrura goldiae</i>	Endangered	Vulnerable	In feature area
Grey falcon	<i>Falco hypoleucos</i>	Vulnerable	Vulnerable	In feature area
Painted Honeyeater	<i>Grantiella picta</i>	Vulnerable	Vulnerable	In the 50km buffer area only
Night Parrot	<i>Pezoporus occidentalis</i>	Endangered	Endangered	In the 50km buffer area only
Princess Parrot, Alexander's Parrot	<i>Polytelis alenandrae</i>	Vulnerable	Vulnerable	In the 50km buffer area only
Australian Painted Snipe	<i>Rostratula australis</i>	Endangered	Endangered	In feature area
Masked Owl	<i>Tyto novaehollandiae kimberli</i>	Vulnerable	Vulnerable	In feature area
Ghost bat	<i>Macroderma gigas</i>	Vulnerable	Near Threatened	In 50km buffer area only
Greater Bilby	<i>Macrotis lagotis</i>	Vulnerable	Vulnerable	In feature area
Northern Brushtail Possum	<i>Trichosurus vulpecula arhemensis</i>	Vulnerable	(not listed)	In 50km buffer area only
Plains Death Adder	<i>Acanthophsis hawkei</i>	Vulnerable	Vulnerable	In feature area
Largetooth sawfish	<i>Pristis Pristis</i>	Vulnerable	Vulnerable	In 50km buffer area only

* Species in bold are located in the feature area.

and to monitor so as to detect changes¹² The Act defines degradation as ‘in relation to land, means a decline in the condition of the natural resources of the land, including the capacity of the land to sustain pastoral productivity, resulting directly or indirectly from human activities on or affecting the land’¹³. The collapse of Central Australia’s ecosystem is clearly a decline in the natural resources of the land.

Land-use change, land clearing, weeds, groundwater depletion, fire, erosion and cumulative impacts are just some of the stressors which are increasing across the arid and semi-arid zone. We understand that land clearing has increased by over 300% in the last five years, with land clearing increasing markedly in this region.

The impacts of climate change are going to exacerbate the impact of these issues across the arid and semi arid zone. The Northern Territory is already a place of climate extremes, and climate change is increasing the intensity, frequency and variability of climatic events such as heatwaves, floods and fires. This means hotter temperatures, more erratic rainfall (and aquifer recharge), drier soils, increased evapotranspiration and more wildfires¹⁴.

This project is estimated to result in 477,620.4 tonnes of CO2-e as a result of land clearing¹⁵.

d. Sacred sites

There is one sacred site located within the proposed clearing area at T-01.

2. Recommendations

ALEC considers that the proponent has not adequately addressed the risk this development poses to threatened species. Considering that up to 14 threatened species may be impacted, including some that are critically endangered, it is not appropriate to assume the risk is low without conducting any field surveys.

In addition, this project will result in substantial emission increases. In 2019, the Northern Territory produced 20.7 million tonnes of GHG emissions. This project will in effect increase the Territory’s annual emissions by 2.3%.

Both of these issues require much further and in depth scrutiny. It is important that this project is referred for an Environmental Impact Assessment under the *Environmental Assessment Act 2019*.

Recommendation 1: The Pastoral Land Board does not make a determination on the Land Clearing Application until the proponent’s project requires the necessary environmental approvals.

Kind regards,

Alex Vaughan - ALEC Policy Officer

¹² Pastoral Land Act 1992, p.5.

¹³ Ibid, p.2.

¹⁴ CSIRO. 2020. ‘Climate change in the Northern Territory: State of the science and climate change impacts’.

¹⁵ P.16 of Land Clearing Application