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Pastoral Lands Board
Via 'Development Applications Online'

Copy to:

Minister Lauren Moss minister.moss@nt.gov.au

Northern Territory Environment Protection Authority NTEPA@nt.gov.au

To: The Northern Territory Pastoral Lands Board,

RE: Standard Pastoral Land Clearing Application – Aroona Station, Katherine Pastoral District, Portion 3982, Pastoral Lease 1038

I am writing to request that you reject the application by Graeme Owen, representing S7R DiGiorgio & Sons to clear 3911 ha of native vegetation for the stated purposes of non-irrigated improved pasture for grazing and hay production – crop rotation on Aroona Station.

3. Description of Proposal

If pastoral lessees cannot manage 'seasonal grazing imbalances, lack of resilience to grazing numbers required for productivity and economic viability' in a sustainable manner then the land is not suitable for pastoral production and the lease should be revoked.

Destroying biodiverse local food services (plants and animals) in order to produce a single, oversupplied food service (beef) goes against international food and nutrition recommendations[1][2][3][4]. The claim ascribed to Pascoe-Bell et al. that clearing for beef is a form of long term sustainable food production is outlandish.

Is the proposed clearing 3911ha or 3947ha? Both numbers are used in this application.

'Integrity of environmental values' and ecological functioning of terrestrial ecosystems is not maintained through clearing thousands of ha of native vegetation and leaving a fragmented landscape with 'corridors and buffers'. Not enough is known about native species, their territorial

[1] https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf
[2] https://www.ipcc.ch/publication/ipcc-expert-meeting-on-climate-change-food-and-agriculture/
[3] https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55_australian_dietary_guidelines.pdf
[4] https://www.amsant.org.au/food-summit/

structures and movement to give confidence that the proposed 'corridors' will provide them with 'connectivity'.

They are clearly planning to grow cotton - this and the many other applicants who pretend otherwise are just embarrassing themselves and the Pastoral Lands Board at this point, it's clear at what "some of the cleared areas may be utilised for crop rotation in the future following advice from experienced local agronomists" means. We've all heard enough 'Farmer's Federation speaking points' at this point.

4. Existing Clearing

It is claimed in the application that there was past attempts to crop at the proposed clearing site – have the reasons why this cropping failed / was abandoned been explored?

6. Water Resources

Irrigation is not the only water use that needs to be considered.

PLC applicants should address the impact of the clearing and proposed use on surface water resources.

<u>Groundwater impacts</u>

Water resources are not described on the basis of this proposal, this is unacceptable as the site overlies shallow groundwater. Borelogs for RN027795 and RN42094 suggest the water table occurs around 105-110 mAHD across the site putting the depth to groundwater at between about 7 and 20 metres below the ground.

In lower lying areas vegetation could access groundwater. These would be expected to be inherently more resilient and may support specialised habitats.

Throughout the underlying karst groundwater is prone to contamination and contains preferential flow pathways to aquatic ecosystems in the Flora River and Mathieson Creek which would rely upon groundwater discharges, including within the Giwining/Flora River Nature Park. Some sinkholes are identified on NRMaps although more appear evident on GoogleEarth. Springs are identified on Mathieson Creek downgradient of the proposal.

The water resources need to be properly investigated and described via an environmental impact statement. Given the significant receiving environments and vulnerability of karst to contamination and inherent unpredictability properly describing these cannot be avoided through this simplified process.

8. Biodiversity

8.2

For risk to be assessed as low according to the risk matrix a combination of factors must be considered. In general this proposal does not use multiple lines of evidence or sufficiently address risks.

I am deeply concerned about risks to aquatic species occurring in the remarkable open waters of Flora River and Mathieson Creek, including those within the Giwining/Flora River Nature Park. These are downgradient of this proposal which rely on groundwater discharges from the Tindall limestone passing under the proposal. As noted the depth to groundwater is shallow between about 10m and 25m below the groundwater surface with shallow karstic limestone occurring. Shallow karst aquifers are vulnerable to contamination and provides a rapid pathway by which sediment and chemical contaminants to enter groundwater

I am most concerned about the ***risk to Freshwater Sawfish*** – it relies on 1 factor only – that the species was not recorded within the proposed clearing according to desktop records and does not consider offsite risks. This species is listed under the EPBC act and is described as vulnerable to reduced water quality and increased sedimentation [5] This proposal could increase both.

I am similarly concerned about risks to important cultural species such as ***pig nosed turtle*** which are not considered in this document, but similarly vulnerable to changes in water quality and habitat.

It is simply not good enough to gloss over water resources. Given the proximity to sensitive receiving environments, the scale of this proposal and its potential to exacerbate threats to these species, water resources must be described. Furthermore the fertiliser regimes, chemicals, weeds and nutrients from additional stock are not quantified. For example this proposal could be associated with 500 tonnes of fertiliser a year, even if it does not eventually seek to undertake a more intensive form of irrigated agriculture. These volumes of nutrients and contaminants pose both direct risks to species as well as eutrophication risks.

The impacts and risks to species associated with this enormous proposal must be assessed via an environmental impact assessment.

Other species

Crested Shrike-tit – relies on 1 factor only – that the species was not recorded within the proposed clearing according to desktop records.

Ghost Bat - relies on 1 factor only – that the species was not recorded within the proposed clearing according to desktop records.

Gouldian Finch – Nesting is the only function habitat considered. While important, this is not sufficient evidence that significant habitat / populations will not be destroyed.

Grey Falcon – this is a threatened species. It doesn't matter if there is suitable habitat elsewhere. All habitat and populations must be protected.

Mertens water monitor – does decreased habitat for cane toad increase the concentration of their population in 'corridors and buffers' and therefore increase threat?

Northern Brushtail Possum – "these areas are not likely to be considered important habitat for this species, even if present' is akin to saying your house is not likely to be important habitat with you because there are better houses elsewhere. If a threatened species is surviving in a landscape, then the habitat it occupies is incredibly important and must be protected.

[5] https://www.dcceew.gov.au/sites/default/files/documents/sawfish-river-sharks-multispecies-issues-paper.pdf

Northern Brush-tailed Phascogale – given this species is endangered it is not sufficient to 'consider it unlikely to be present' from desktop data only and the absence of 2 tree species that are sometimes associated with the populations recorded in other areas.

Northern Quoll – Land managers are failing to control cats. The current management plan from Aroona along with evaluation should be attached. Again the risk rating is made on 1 factor only and therefore should not be rated as low according to the risk matrix.

Pale Field Rat – Land managers are failing to control cats. The current management plan from Aroona along with evaluation should be attached. Again the risk rating is made on 1 factor only and therefore should not be rated as low according to the risk matrix.

Red Goshawk – Given the applicant admits clearing poses a key threat – fragmentation of habitat the rating, based on 1 factor – desktop records of presence in clearing area, is not sufficient to rate the risk as low. The area of potential habitat being cleared at a regional level is not 'small' and must be considered if this the NT PLC assessment process is to have any meaning at all.

Victoria River Squat Snail – this species appears to be pervasive through the site. ***The threats to this species must be properly evaluated via an environmental impact assessment.***

11. Weed Management

Introduction of environmental weeds . It is very unclear what plants the applicant intends to grow. The invasion risk is increased because this proposal is close to Mathison and Flora Rivers.

Assuming the applicants intends to grow cotton rotated with sorghum, there is significant evidence that these plants can persist as an environmental weed, especially near water ways https://www.ogtr.gov.au/sites/default/files/files/2021-07/the_biology_of_sorghum.pdf

12. Cultural Heritage

As well as on site risks this proposal must evaluate risks to cultural values in receiving environments in Giwining/Flora River Nature Park. These rely on maintenance of the same quality and quantity of groundwater groundwater which flows at a shallow depth under this application.

13. Greenhouse Gas Emissions

Is this calculation presented for clearing 3911ha or 3947ha of native vegetation (both numbers are given in the application)?

In either case the application estimated the emissions are 472,053 tonnes CO2. ***This puts it dangerously close to being a large emitter.***

I am also concerned that given the probable occurrence of groundwater dependent terrestrial vegetation in the northwest of the area, which is not acknowledged and likely to contain more stored carbon **this is probably an underestimate,** even if the atmospheric emissions from increased stock are not included.

The estimate should include the increased emissions from the planned increases in stocking.

This proposal needs to be referred for environmental impact assessment to ensure atmospheric emissions are properly considered as they are dangerously close to 500,000 tones and likely underestimated.

While I am opposed to these carbon emissions I also believe they must be offset at cost to the applicant.

14. Environmental Protection

Chemical spray drift a buffer of 50m (not 210m) for watercourses is given

CONCLUSION

For the reasons stated above I request that the Pastoral Land Board refuse this application and refer this to the Environment Protection Agency under the Environment Protection Act for full and thorough assessment.

Yours Sincerely,

[redacted]