



30 July 2021

To

Executive Officer
Pastoral Land Board

By Email to:

PastoralAssessment.DEPWS@nt.gov.au

Copy to:

Minister Eva Lawler: Minister.Lawler@nt.gov.au

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

To Whom it May Concern,

Top End Pastoral Company – Application to Clear Pastoral Land (s38(1)(h)) on Claravale Station

The Environment Centre NT (**ECNT**) is the peak community sector environment organisation in the Northern Territory of Australia, raising awareness amongst community, government, business, and industry about environmental issues, assisting people to reduce their environmental impact, and supporting community members to participate in decision-making processes and action.

Thank you for the opportunity to provide a comment on the application (**Application**) of Top End Pastoral Company to the Pastoral Land Board (**PLB**) for a permit to clear Pastoral Land under section 38(1)(h) of the *Pastoral Land Act 1992 (NT)* in respect of Claravale Station Pastoral Lease 01214.

ECNT's view is that it is inappropriate that the Application be assessed using the new "simplified" pastoral land clearing guidelines.

ECNT notes that the Application will impact 8 threatened species which have been detected on or near the land in question, including:

- (a) The Ghost Bat;
- (b) The Partridge Pigeon;
- (c) The Gouldian Finch;
- (d) The Pale Field Rat;
- (e) The Victoria River Squat Snail;
- (f) The Mertens' Water Monitor;
- (g) The Mitchell's Water Monitor; and
- (h) A rare bladderwort.

Given the number of threatened species located on the land in question, the likely significant impacts on these species as set out in this submission, and the cumulative

impacts of the Application together with other threatening processes in the Daly Region, the application should be:

- (a) rejected and resubmitted as a standard application;
- (b) referred for assessment under the *Environment Protection Act (NT)* as it has the potential to have a significant impact on the environment; and
- (c) referred for assessment under the *Environment Protection and Biodiversity Conservation Act (Cth) (EPBC Act)* as it has the potential to have a significant impact on a number of matters of national environmental significance.

Significant impact on an important population of the Partridge Pigeon

ECNT notes that the Partridge Pigeon (*Geophaps smithii smithii*) is listed as vulnerable under both the *Territory Parks and Wildlife Conservation Act 1976 (NT)* and the EPBC Act. The population of the Partridge Pigeon the subject of Application is an “important population” for the purposes of the Australian Government’s *Matters of National Environmental Significance: Significant impact guidelines 1.1*¹ under the EPBC Act because it is “near the limit of the species range” (p 10), and meets numerous significant impact criteria named therein, including that there is a real chance or possibility that the action will (p 10):

- reduce the area of occupancy of an important population;
- fragment an existing important population into two or more populations; and/or
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.

The application must be clearly referred under the EPBC Act and the *Environment Protection Act*. To approve the land clearing application without such a referral being made may knowingly implicate the Pastoral Land Board in a breach of that legislation. ECNT advises that it intends to write to the Commonwealth and request that this application be called in under the EPBC Act, and to the NTEPA and request that this application be called in under the *Environment Protection Act*.

ECNT also notes that the applicant itself identified the risk to the Partridge Pigeon as “medium” based on fieldwork conducted in the Application area. It is unclear why DEPWS has then assessed the risk as “low”, particularly given the significance of the population as outlined above. This is clearly incorrect. ECNT believes that the application therefore does not meet the criteria for the simplified process because it does not have a low likelihood of impacting threatened species.

Significant impact on an important population of the Ghost Bat

The Ghost Bat (*Macroderma gigis*) is listed as vulnerable under both the EPBC Act and the *Territory Parks and Wildlife Conservation Act 1976 (NT)*. The population of ghost bats at Claravale Station is considered to be of high significance for the species in the NT, as it is one of only 5 known maternity roosts in the whole of the Territory. The many

¹ <https://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance>.

interconnected caves and sinkholes in the Tindall limestone aquifer at Claravale are important roosting sites for the ghost bat, and the clearing application will clear important foraging habitat for this population.

ECNT notes that the population of the Ghost Bat the subject of the land clearing application is an “important population” for the purposes of the Australian Government’s *Matters of National Environmental Significance: Significant impact guidelines 1.1* under the EPBC Act because it is a “key source population for breeding or dispersal” due to the Claravale Ghost Bat population being one of 5 known maternity roots in the Territory. The action meets a numerous significant impact criteria named therein, including that there is a real chance or possibility that the action will (p 10):

- lead to a long-term decrease in the size of an important population of a species;
- reduce the area of occupancy of an important population;
- disrupt the breeding cycle of an important population; and/or
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to extent that the species is likely to decline.

Accordingly, the application must be clearly referred under the EPBC Act and the *Environment Protection Act*. To approve the land clearing application without such a referral being made may knowingly implicate the Pastoral Land Board in a breach of that legislation. ECNT advises that it intends to write to the Commonwealth and request that this application be called in under the EPBC Act, and to the NTEPA and request that this application be called in under the *Environment Protection Act*.

It is unclear why DEPWS has then assessed the risk to the Ghost Bat population on Claravale as “low”, particularly given the significance of the population as outlined above. This is clearly incorrect. ECNT believes that the application therefore does not meet the criteria for the simplified process because it does not have a low likelihood of impacting threatened species. It should be required to be processed through the standard land clearing process.

Cumulative impacts of the proposal with other threatening processes in the region

Land clearing is a fundamental pressure on the environment. Land clearing causes the loss, fragmentation and degradation of native vegetation, and a variety of impacts on soils (eg erosion, salinity, loss of nutrients and acidification) and disrupts essential ecosystem processes.² Threats to biodiversity from land clearing and habitat loss are one of the greatest threats to threatened species in Australia, and to the environment more generally.³

ECNT draws the Pastoral Land Board’s attention to recent research which indicates that Northern Australia’s tropical savannas are one of 19 ecosystems in Australia that meet the

² State of the Environment Australia 2016. “Land Theme: Regional and landscape-scale pressures: Land clearing.” <https://soe.environment.gov.au/theme/land/topic/2016/regional-and-landscape-scale-pressures-land-clearing>

³ Neldner et al. 2017. *Scientific review of the impacts of land clearing on threatened species in Queensland*. Queensland Government, Brisbane. https://environment.des.qld.gov.au/_data/assets/pdf_file/0020/90272/land-clearing-impacts-threatened-species.pdf

criteria of being under collapse.⁴ Bergstrom et al suggest that it is imperative to understand how different threatening processes combine cumulatively (acting in what they term “threat webs”) to further threaten Australia’s collapsing ecosystems. As habitats become increasingly fragmented, populations become more vulnerable to other threatening processes, such as climate change, changes in stream flow regimes, predation by invasive species and destructive fires, and they lose the ability to recolonise suitable habitat.

ECNT is concerned that there is very little attempt in the Application to understand the cumulative impacts of different threatening processes in the region, beyond the startling admission that 13% of the Daly Basin bioregion is already cleared.

ECNT refers to research recently undertaken by the National Environmental Science Program’s Northern Australian Environmental Resources Hub (**NESP**) which created spatial data that can be usefully used to inform species conservation policy, assessments of species’ conservation status and decision-making about threat mitigation and management.⁵

ECNT used this data to create a map showing the cumulative risk from land clearing for agricultural development (historically, and projected) in the Northern Territory. A copy of the map is **attached**, and clearly demonstrates that Claravale Station, and the Daly and Katherine catchments more broadly, are at a very high risk of clearing compared with other areas of the Northern Territory. ECNT submits that the risk of this habitat being cleared has increased since the data was published, due to the announcement of a cotton gin near Katherine which will spur agricultural development in the region significantly (including associated land clearing). ECNT also notes that the same proponent has recently (in July 2021) had an application to clear 667 hectares of land on its adjacent property approved, yet there is no mention of this in the application or the Department’s consideration of the application. It is possible that the proponent intends to clear more land on its properties in the future. The cumulative impacts of the Application, together with the 667 hectares on an adjacent parcel of land, and any future clearing proposed by the proponent, must be considered and are likely to be far more significant than as described in the Application.

ECNT also generated 3 vulnerability maps using this data showing the cumulative impacts of key threatening processes to three of the listed species in the area of the Application (**attached**). The maps overlay the known habitat of these threatened species with maps showing threats posed by a range of threats including agriculture (ie land clearing), climate change, disease, invasive species, changed fire regimes, and grazing. Notes showing how these cumulative vulnerability maps were produced are **attached**.

These maps demonstrate that the land the subject of the application is an area of high vulnerability to multiple threatening processes with respect to two species listed under the EPBC Act (the Ghost Bat and Gouldian Finch). With respect to the Partridge Pigeon, the map is less stark, however ECNT submits that the location of this species at Claravale Station

⁴ Bergstrom et al. 2021. "Combating ecosystem collapse from the tropics to the Antarctic." *Global change biology* 27(9):1692-1703.

⁵ A. Pintor, M. Kennard, J. Alvarez-Romero and S. Hernandez, “Prioritising threatened species and threatening processes across northern Australia”, User Guide for data, Northern Australia Environmental Resources Hub, National Environmental Science Program, <https://www.nespnorthern.edu.au/wp-content/uploads/2020/04/Prioritising-threatened-species-and-threatening-processes-across-northern-Australia-User-guide-for-data.pdf>.

outside the known area of its habitat in the map (according to the NESP data) supports our contention that it is an important population for the purposes of the EPBC Act, because it is at the very outer edge of its range.

ECNT notes that the Pastoral Land Board is required by law to consider the cumulative impacts of the Application and other threatening processes. Specifically, in considering whether or not an action meets the threshold of having a significant impact on the environment under s48 of the *Environment Protection Act NT* (and thus requires referral) section 10 defines impact to include impacts that are cumulative and may occur over time. The NTEPA's guidance on referring a proposed action under the *Environment Protection Act 2019 (NT)* also takes a broad view of the threshold test for referral under the legislation.⁶ In particular, this guidance states:

“... it is important for proponents to examine all potential impact sources that relate to the action, and the potential impact pathways between the source of an impact and sensitive receptors and environmental values that may be impacted. These need to be considered for the life of the proposed action, both in isolation and cumulatively with other reasonably foreseeable proposals and approved actions.”

If the land clearing application is assessed cumulatively with other threatening processes in the Daly catchment as evidenced by the maps provided with this submission, the possible impact of the Application on the environment is clearly likely to be highly significant and meets the referral threshold under the *Environment Protection Act NT*.

Inadequate soil surveys and land use assessment

ECNT submits that it is apparent from the Land Type map accompanying the Application that not all of the proposed land clearing areas have been surveyed, which is inconsistent with the expectations of the Northern Territory's Land Clearing Guidelines. Instead, a number of photos appear to have been taken or the required information surmised from historic soil samples from elsewhere in the region.

ECNT's view is that, given the complexity of the issues raised by the application, including but not limited to impacts on important populations of threatened species and the location of areas of highly ecological and cultural sensitivity within the application area (including drainage depressions and streams, riparian vegetation and sinkholes), a more detailed assessment is required for the Application. ECNT believes that a land capability assessment is inadequate for an Application of this complexity, and a land suitability assessment is clearly required.

ECNT puts the PLB on notice that, despite the Application stating that it is for pasture improvement, it is likely that the proposed development will require irrigation (possibly through surface water harvesting via the construction of on farm dams on the property) and thus a water licence application and a non-pastoral use permit should be submitted concurrently with the application. ECNT notes a concerning loophole (seen, for instance,

⁶ https://ntepa.nt.gov.au/_data/assets/pdf_file/0009/805167/referring-proposed-action-to-ntepa-guideline.pdf.

with respect to Maryfield Station) for proponents apply for a land clearing permit for pastoral purposes and a more limited type of land assessment, only to subsequently apply for a water licence for irrigation purposes after which the land is already cleared. It is incumbent upon the PLB to question the proponent about its plans for its developments on Claravale, including water needs.

Greenhouse gas emissions

Despite the considerable quantity of greenhouse gas emissions from the project (which ECNT estimates to be in the vicinity of 148,000 tonnes of carbon dioxide equivalent)⁷, this impact is not mentioned, nor are any offsets proposed to mitigate these emissions. This clearing proposal alone could produce emissions equivalent to 0.7% of the NT's total greenhouse gas emissions in 2019.⁸ This is a significant and unacceptable amount of emissions at a time when the NT Government needs to be reducing emissions to play its part in addressing climate change. A clearing approval of this magnitude is inconsistent with the NT Government's greenhouse gas emissions target of net zero emissions by 2050.

Cultural heritage and sacred sites

ECNT notes with concern that there appear to be a number of sacred sites in the vicinity of the Application area. A registry extract is manifestly inadequate to protect these, and any other sites that may exist in the area. In addition, ECNT notes that there is a significant disparity between the application area delineated on the AAPA registry extract and the size of the area the subject of the Application to the PLB. An authority certificate granted under the *Northern Territory Sacred Sites Act 1989 (NT)* should be a mandatory requirement, or there is a significant risk that sacred sites may be damaged in breach of the legislation. In addition, there are a number of important archaeological sites in the vicinity of the Application area, including sites that are just 170 metres away from the boundary of the area. Clearing in such close proximity, particularly clearing that will involve two rounds of late dry season burning, would put these sites (which are likely to be at least 10,000 years old) at unnecessary risk.

Summary

ECNT is extremely concerned by the rate of increase in land clearing applications and approvals in the Northern Territory, particularly in the Daly and Katherine catchments. The PLB considered applications for 21,700 hectares of land clearing in 2020, more than double the area approved for clearing in 2019, and more than ten times the area approved in 2018. The PLB approved 12,900 hectares of clearing were approved in 2020 with applications for a further 8,800 hectares of clearing held over pending further information. In 2021 so far, an

⁷ Estimated using the figure of 148.3 tonnes of CO₂ equivalent emissions per hectare from savanna clearing and burning from Bristow, M. et al. (2016) "Quantifying the relative importance of greenhouse gas emissions from current and future savanna land use change across northern Australia" *Biogeosciences* 13:6285–6303 <https://doi.org/10.5194/bg-13-6285-2016>.

⁸ See the 2019 Greenhouse Gas Inventory for the Northern Territory from the Australian Greenhouse Emissions Information System website: <https://ageis.climatechange.gov.au/>

application for 4,100 hectares of clearing is under assessment pending further information. ECNT understands that this is likely to be the start of an avalanche of applications. The NT Farmers Association has revealed plans for 168,000 hectares of farming development across the Northern Territory focused particularly on the Daly catchment, which will not only increase the Northern Territory's greenhouse gas emissions significantly, but also require millions of litres of the Northern Territory's groundwater and surface water, as well as exacerbating the impacts of climate change (through increased heat and changes to the water table from clearing and irrigation).

The Pastoral Land Act is not fit for purpose to protect the Northern Territory's pastoral estate from habitat fragmentation and damage on the vast scale that is underway, and being proposed. The Northern Territory is completely unprepared to respond to the environmental threats posed by the proposed large-scale agricultural development in a wider context of ecological and climate collapse, with piecemeal regulatory approvals that frustrate any attempts to strategically assess the likely cumulative impacts of these developments instead the norm. Urgent regulatory reform is needed so that landscape scale integrated protection and management of the Northern Territory's unique savannas and freshwater systems can occur.

Given the presence of a number of threatened species in the application area, the important populations of the Partridge Pigeon and Ghost Bat in particular, and the high vulnerability of threatened species to multiple threatening processes in the Application area, the Application should:

- (a) be rejected and resubmitted as a standard application as it does not comply with the simplified pastoral land clearing guidelines; and
- (b) be referred for assessment under both the *Environment Protection Act NT* and EPBC Act.

If you have any questions, please do not hesitate to contact Kirsty Howey on kirsty.howey@ecnt.org.

Yours faithfully,

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