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2 January, 2025

Pastoral Land Board
Via 'Development Applications Online'

To the Pastoral Land Board,

**RE: Pastoral Land Clearing Application – Helen Springs, PPL 1001, NTP 1512, Barkly District, 4996.7 hectares**

Thank you for the opportunity to comment on this application to clear native vegetation by a pastoral lease holder by Mathew Barnes, from Canopus Agriculture P/L representing S. Kidman and Co. to clear 4996.7 hectares of native vegetation for the purposes of Dryland Fodder crops (forage sorghum) for hay/silage/grazing.

We object to this proposal, our reasons are as follows:

**Context**

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This proposal is for a huge area and will impact on a number of protected species and scared sites. Consideration of environmental and cultural impacts based upon desk studies and abstracts of records in the case of sacred sites is grossly insufficient. This application must be supported by:

1. field data for flora and fauna
2. consultation and consent of Traditional Owners and Custodians (i.e. public meeting)
3. referred for environmental impact as assessment by the NTEPA
4. referred for consideration under EPBC Act 1999

The application has been released for comment over the Christmas period. Though permitted under current regulation this timing demonstrates disrespect for the public, who these applicants are leasing land from. The timing is clearly a strategy designed to avoid public scrutiny and has reduced the opportunity for informed comment. The NTG offices were closed for the Christmas - New Year period reducing the opportunity for support during the comment period and the number of business days over which the comment period occurred.

We note that it has been an especially challenging time in this region with severe heatwave conditions occurring in Barkly in the week prior to Christmas. This highlights the importance of protecting and building ecosystem resilience in the region.

**Reasons for our objections**

In addition to the reasons outlined in the 'context' section above we object to this application for the following reasons:

1. The proposal conflicts with the objects of the Pastoral Land Act 1992
2. The location is unsuitable with respect to water resources

3. The establishment plan is inadequate, unclear and diminishes the extent of chemicals use
4. Risks related to weeds including weeds that could impact downstream wetlands and biodiversity
5. Biodiversity risks
6. Cultural Heritage
7. Atmospheric emissions
8. Suitability of applicant
9. Risk of incremental escalation of the proposal
10. Environmental impact statement needed

**1. The 'development' conflicts with the objects of the Pastoral Land Act 1992**

a. to provide a form of tenure of Crown land that facilitates the sustainable use of land for pastoral purposes and the economic viability of the pastoral industry;
b. to provide for:
    i. the monitoring of pastoral land so as to detect and assess any change in its condition;
    ii. the prevention or minimisation of degradation of or other damage to the land and its indigenous plant and animal life; and
    iii. the rehabilitation of the land in cases of degradation or other damage

Clearing of native vegetation for cropping including 'feed / fodder' for cattle is not a sustainable land use and it does not prevent or minimise degradation of or other damage to the land and its indigenous plant and animal life as is therefore incompatible with this form of land tenure and the objects of the Pastoral Land Act

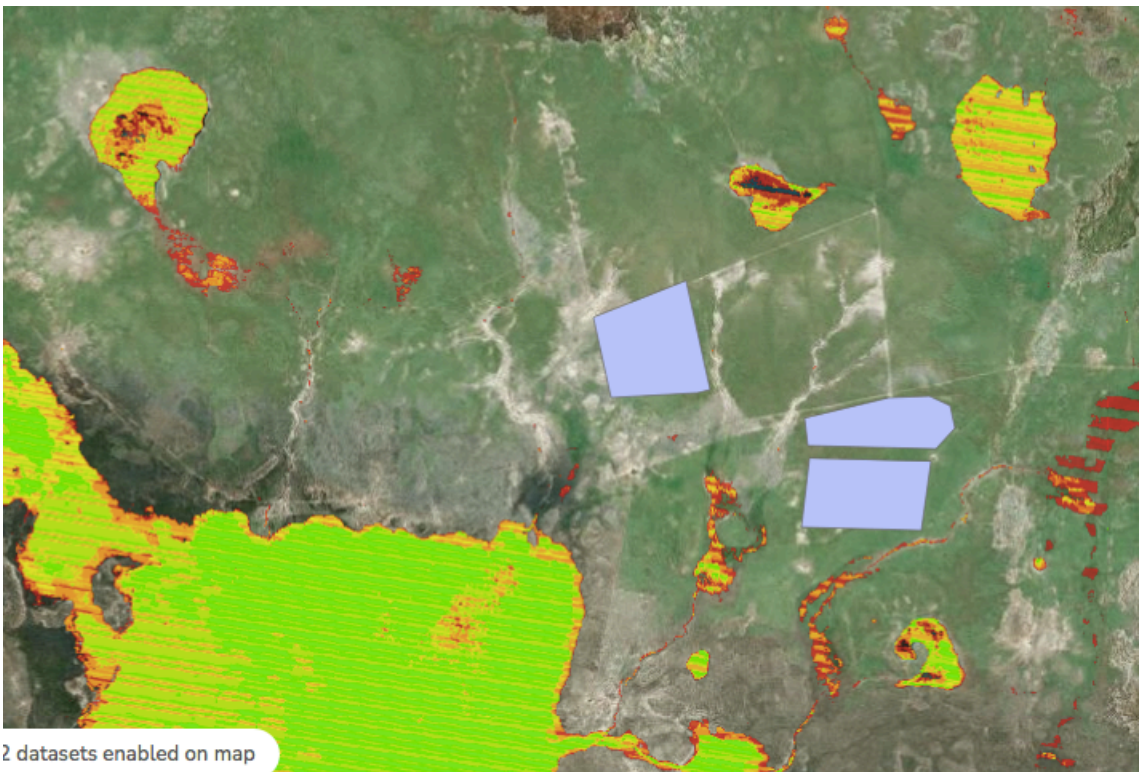
**2. The location is unsuitable with respect to water resources (because of concerns relating to major wetlands, groundwater recharge, lack of catchment wide considerations):**

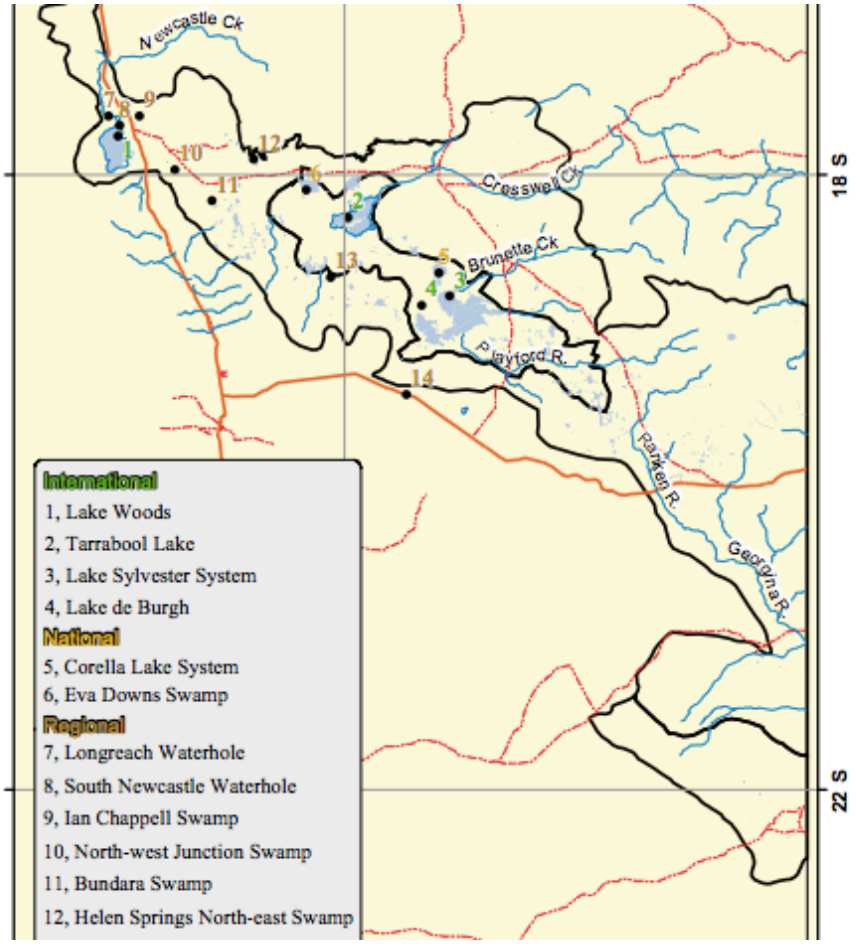
**2a. Wetlands**

The application does not acknowledge that regionally significant wetlands occur downstream of the proposed clearing. This area is located low in the drainage system, which terminates at Bundara swamp approximately 10 km away. Digital Earth Australia[1] highlights that Bundara swamp is frequently inundated for extended periods. Given the scale of this application impacts on downstream wetlands must be considered.

The wetlands in the NT portion of the Mitchell Grass Downs bioregion support significant waterbird breeding colonies, threatened bird species and significant numbers of migratory birds (Bundara 25 spp., 1 breeding[2]). The same report identifies that "In terms of the number of bird species, total number of individuals and size of breeding colonies, the Barkly Tableland wetlands are the most significant in the Northern Territory outside the northern floodplains." This is confirmed in the SREBA (p201).

[1] https://maps.dea.ga.gov.au/#share=s-mYmYKh57NcZV7nUN8vaV52ZNO5S
[2] file:///Users/Guest/Downloads/Mitchell_Grass_Downs_Northern_Territory.pdf (page 16)


2 datasets enabled on map


Newcastle Ck
Crosswell Ck
Brunette Ck
Pinyford R.
Rankin R.
Georgina R.
18 S
22 S
International
1, Lake Woods
2, Tarrabool Lake
3, Lake Sylvester System
4, Lake de Burgh
National
5, Corella Lake System
6, Eva Downs Swamp
Regional
7, Longreach Waterhole
8, South Newcastle Waterhole
9, Ian Chappell Swamp
10, North-west Junction Swamp
11, Bundara Swamp
12, Helen Springs North-east Swamp

We outline our concerns about degradation of this system via weeds, pesticides and eutrophication, along with significant impacts to biodiversity in the sections which follow.

**2b. Risks of contamination to Cambrian Limestone aquifer recharge**

We dispute the applicant's claim that the proposal poses a low risk of groundwater contamination as it does not recognise the possible contamination pathways. The clearing is located above Cambrian limestone with aquifers within the Anthony Lagoon Formation and the Gum Ridge Formation. (Shown as Cmy and Cmg respectively in the figure that follows.)

Knapton [3] identifies that given the soil moisture deficits found in semi-arid / arid catchments for recharge to occur water needs to be flowing or ponded (i.e. excess to evapotranspiration and soil moisture). Knapton elaborates natural recharge is primarily from

1. precipitation via the mechanism mountain front recharge and
2. infiltration of overland flows through the creek beds / flood outs

Bundara Swamp which is just downgradient of the clearing proposal is a fresh terminating wetland overlying the Anthony Lagoon Beds. It can be inferred that this is a probable recharge area via the mechanism of infiltration of overland flows via flood inundation. The bore log for RN038282 within this wetland indicates only 3m of clay and laterite (0-3 m) then weathered siltstone and sandstone (3-48m) and limestone below there, hence contaminants could readily enter the CLA.

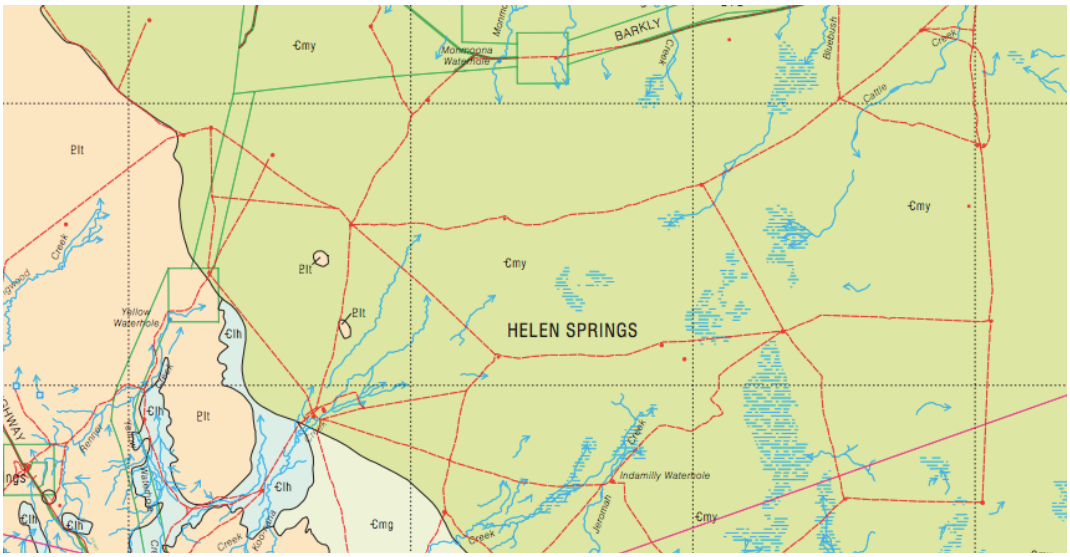



Figure underlying formations

**2c. Need for a catchment wide approach to land use decisions and management of catchment risks**

Land use decisions in the catchment must seek to protect wetlands, waterways and Cambrian Limestone Aquifer recharge water quality. The current *ad hoc* regime of clearing approvals is unable to do this. This is especially significant as we are confronted with the prospect of more contaminating land uses, including for irrigated agriculture given the large water allocations in the Georgina Wiso water allocation plan and the increasing amount of land clearing proposals. We urgently need a moratorium on *ad hoc* proposals like this while there is no strategy to protect the public interest and the region's environmental assets.

[3] https://territorystories.nt.gov.au/10070/827500/0/123 (page 68)

**3. The establishment plan is inadequate, unclear and diminishes the extent of chemicals (pesticide including herbicide and fertiliser) use required during establishment and annually – these pose risks to wetlands including Bundara wetland and the quality of recharge to the Cambrian Limestone Aquifer**

Applications of this nature will introduce significant herbicides and fertilisers, which would otherwise not be introduced to this land. The application is completely inadequate in the details provided about the extent of use and mitigations.

The establishment plan should have quantified what, when and how chemicals will be used. We understand that proposals of this nature typically involve at least two broad scale applications of herbicide at the outset - one post clearing once the seed bank has germinated with a follow up application prior to sowing. This would occur in the early wet season when the risks of offsite loss are significant. The proposed buffers will not stop contaminants in solution moving to sensitive wetland receptors.

Establishment of pasture will introduce nutrients and risks eutrophication of adjacent water features. Other similar applications typically describe that fertiliser is applied to crops at around 100kg/ha. For an application of 5000ha this amounts to application of around 500 tonnes of fertiliser per annum close to sensitive environmental receptors. It is wholly inadequate to fail to describe this and to gloss over the risks associated with this level of use close to sensitive environmental receptors which support or may support threatened species and to which Native Title holders maintain rights.

We emphasise that this proposal is especially bad because it involves cropping which means the pesticides and fertilisers are not a one-off but represent an annualised pollution activity.

The risk eutrophication of nearby wetlands is heightened as fertiliser will be applied in the wet season when the risk of offsite export is greatest and highly uncertain.

Furthermore, there will be other ongoing risks. For example we are aware that proposals such as this typically involve ongoing broadleaf selective herbicide (to mature plants) such as 2,4-D Amine and even more extensive chemical use if this changes to dryland cotton cropping which, as current regulation stands, would not require any further approvals.

Risk of export of herbicides and pesticides is especially troubling given the site's proximity to Bundara Swamp which contains extensive persistent open water areas which are ecological refuges and may be prone to eutrophication, and should be expected to support plants and animals at risk from pesticides and weed infestations.

**4. Weeds including weeds that could impact downstream wetlands and biodiversity**

In addition to weeds introduced through intensification of land use Sorghum, which is proposed to be planted, can persist as environmental weeds, especially in wetland areas https://www.ogtr.gov.au/sites/default/files/files/2021-07/the_biology_of_sorghum.pdf

**5. Biodiversity risks**

**5a. Impacts on important areas for waterbirds, including probably wetland refugia based upon the logic used in the SREBA**

SREBA p135 highlights *water bodies on intermittent systems in the region also have high conservation value as waterbird habitat*. It also details p201 "*Two dominant conservation management themes emerged from the SREBA studies in relation to waterbirds. The first was the importance of isolated wetlands with persistent surface water in the Newcastle Creek drainage system and on the Sturt Plateau (Wiso-channel system). These sites support greater waterbird species richness compared to more ephemeral wetlands and to those on the Roper River. They are critical as they enable small-scale waterbird breeding events through dry conditions and are likely to be important refuges for waterbird persistence during years with low rainfall."*

Jaensch 1994 identifies the area comprises open water and wooded areas. SREBA highlights significant communities including lignum and corumbia occurring on floodplain areas. This application should have regard to these areas especially important as Mitchell Grass downs are under-represented in conservation areas[4].

SREBA p235 highlights significant flora species predominantly occur in wetland habitats and states this reinforces the high conservation value of these restricted parts of the landscape. It identifies "*habitat degradation, fragmentation and loss, inappropriate fire regimes, reduction in surface water availability, surface water contamination, and soil contamination, erosion and sedimentation will potentially impact the persistence of significant flora species."* It also highlights the loss of resilience to terrestrial biodiversity from climate change. This proposal risks surface water contamination, sedimentation and habitat degradation further reducing resilience impacted by climate change.

**Although just outside the SREBA area parts of Bundara Swamp are close to the SREBA criteria (Fig 6.19) for drought refuges based upon inundation. It should be protected as an important refuge for waterbirds with areas in its lower catchment appropriately protected (not cropped).**

**5b. Failure to deal with cumulative risks**

The applicants justification for their lax approach to assessment of risks to biodiversity and apparent indifference to risks posed to wetlands waterways and groundwater recharge is that the (enormous) areas being cleared are sufficiently small so as to not pose a significant risk to threatened species.

We object to this approach to decision making as inappropriate for dealing with listed species and environmental receptors. It is effectively facilitating extinction via 'death by a thousand cuts', fragmentation and refugia destruction.

**5c. Failure to undertake threatened species surveys**

The application identifies Common Greenshank, Curlew Sandpiper, Northern Blue-tongued skink and Sharp-tailed sandpiper. The application also proposes to clear Chrisopogon fallax which is gouldian finches' preferred food source[5].

No field data has been gathered on threatened species to support this application. The public have a right and expectation that reliable field data is collected used in assessing impacts on threatened species. If a population of an endangered species is impacted either directly or indirectly then this

[4] https://www.researchgate.net/publication/238723990_Mitchell_Grass_Downs_Northern_Territory

[5] https://www.environment.gov.au/biodiversity/threatened/species/pubs/413-conservation-advice-07122016.pdf

constitutes serious and irreversible harm and, with a precautionary approach, should be evaluated before such as decision is made. We should not be playing 'Russian roulette' with threatened species.

***Given the many species records within the region and the important grassland and wetland areas downgradient field surveys are absolutely necessary under principles of ecologically sustainable development***

**6. Cultural Heritage**

**The cultural heritage assessment is inadequate because:**

**6a.** The applicant has provided an abstract of records for registered sacred sites and heritage assessment from the Heritage Branch. This advice states that "*the likelihood of possible unrecorded Aboriginal or Macassan archaeological places has been assessed as possible or likely. The extent of pre-existing disturbance and the nature of the work itself has also been considered.*
***The Heritage Branch recommends that an archaeological survey and cultural heritage management plan are required*** *to identify and mitigate the impact to Aboriginal or Macassan archaeological places and objects."*

**6b.** The application does not include any consultation with Traditional Owners or Custodians about impacts on cultural values or archeological surveys. These must occur prior to any evaluation of this application in order for it to be based on meaningful information. It is clear that grasslands on vertisols like this are associated with significant cultural values[6].

**7. Atmospheric emissions**

We object to this proposal on grounds of its fundamental non-compliance with the NTG carbon offsets framework.

The offsets framework makes clear offsets *cannot be used to make an unacceptable impact acceptable.* This proposal has unacceptable climate change impacts (i.e. massive carbon emissions) which are avoidable. Under the policy this proposal should therefore be illegal.

The estimated emissions from the clearing are 358,401.30 tCO2-e. The NTG offsets policy for large emitters outrageously does not require these emissions to be offset. While we object to these emissions, we also object to the principle that the cost of atmospheric emissions is shifted onto the public. We are suffering the enormous cost of global warming's catastrophic impacts. The enormity of this internalisation of benefits and socialising of costs is especially remarkable given the clearing can be expected to increase the sale value of the pastoral lease.

We also object that this offset may be gifted to the same company for each pastoral lease.

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[6] https://www.nlc.org.au/uploads/pdfs/NERP_Ganalanga-Mindibirrina_IPA-PoM.pdf refer page 38 which highlights kangaroo, nail tail wallaby, bush turkey etc are valued in Mitchell grasslands. These values and loss of these values are not recognised

**8. Suitability of applicant**

The applicant on its website appears to be actively undermining the current policies and approach under which this application is made and calling for a Trump style policies. E.g. the applicant's website contains the quote *"Mrs Rinehart said Australia was experiencing similar issues "thanks to the same green ideology", highlighting record business failures, investment jitters and onerous government policies that were "not at all friendly" to the mining or agriculture industries."*[7]

This is a very significant proposal in need of proper assessment and regulation. The applicants offer no confidence that they understand or are committed to fully implementing the law and have any respect for why conditions are implemented. This is clearly evident in the time of this proposal, failures to consult with Traditional Owners.

**9. Risk of incremental escalation of the proposal**

We are concerned that this application may not describe the full extent of the applicant's plans for this land. We understand sorghum is frequently a pathway to cotton production. Given this area overlies the Cambrian Limestone Aquifer (Georgina- Wiso WAP) it may be subject to a future groundwater extraction licence for irrigated agriculture with even greater risks associated with water extraction and groundwater/surface water contamination introduction of weeds

If it were to move to cotton plus a huge groundwater licence application, further highly significant impacts would be involved (e.g. pesticides, weeds, offsite contamination). The approval processes applied under NT legislation may also be different.

Given the applicant's dismissal of proper regulation as 'green ideology' we have no confidence that they are being forthright in their long-term plans. To ensure the full long term plans and impacts are disclosed and assessed upfront at the necessary level, the application should include a binding commitment (i.e. a bond) guaranteeing that there will not be subsequent diversification to cotton/irrigated agriculture associated with this clearing down the track.

**10. Environmental impact statement needed**

We disagree with the applicant's assessment that referral to the NTEPA is not warranted. This is a very large application with a variety of impacts.

**Conclusion**

For the reasons outline we object to this pastoral clearing application. ***We request that the Pastoral Land Board refuse this application. The application should first by referred to the Environment Protection Agency under the Environment Protection act for a full and thorough assessment***.

Regards,

Adrian Tomlinson and Jacqueline Arnold

[7] https://www.kidman.com.au/gina-rinehart-calls-for-genuine-leaders-to-take-australia-forward-in-new-trump-era/

**Copies to:**

- NT Chemical Coorindator
- Chairman NT EPA: Dr Paul Vogel
- Environment Centre NT: Attention Dr Kirsty Howey
- Arid Lands Environment centre: Attention Roz Walden
- Professor John Woinarski, Charles Darwin University
- Biodiversity Council