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To Whom it May Concern,

Northern Territory Draft Biodiversity Offsets Policy

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 comment on the NT Draft Biodiversity Offsets Policy (**Draft Policy**). While the development of an offsetting system has the potential to support the application of the mitigation hierarchy enshrined in the *Environment Protection Act 2019 (NT)*, we have concerns about the design and implementation of the Draft Policy and Technical Guidelines accompanying it which are set out below.

Biodiversity offsetting is currently under considerable scrutiny in Australia and internationally. Numerous scientific and regulatory reviews have identified serious concerns about whether biodiversity offsetting is indeed possible at all, and may maintain or speed biodiversity decline. A 2012 review of restoration ecology literature found that:

“Confidence in the ability of restoration to deliver genuine biodiversity offsets is undermined by the problems of defining and measuring the biodiversity values that are lost and gained, considerable uncertainty surrounding the effectiveness of restoration techniques, and long time-lags. The increasingly broad application of offsetting, often with limited scientific support, is therefore of concern.”¹

These concerns have been heightened with the recent review of by the NSW Auditor General of that state’s biodiversity offsets framework, and media and academic commentary regarding application of biodiversity offsetting across Australia.²

Criticism of offsetting schemes must be understood against the backdrop of the current biodiversity crisis in the Northern Territory and Australia more broadly. The Northern Territory’s tropical savanna, the arid zone ecosystem, and mangroves of the Gulf of Carpentaria meet the criteria of “collapsing” ecosystems in Australia,³ and it is crucial that the Northern Territory Government takes proactive steps to halt the decline

¹ Maron et al, “Faustian Bargains? Restoration Realities in the Context of Biodiversity Offset Policies” (2012) 155 *Biological Conservation* 141.

² NSW Auditor General, *Effectiveness of the Biodiversity Offsets Scheme*, 2022, <https://theconversation.com/the-government-hopes-private-investors-will-help-save-nature-heres-how-its-scheme-could-fail-193010>, <https://theconversation.com/can-we-really-restore-or-protect-natural-habitats-to-offset-those-we-destroy-121213>, <https://theconversation.com/biodiversity-offsets-could-be-locking-in-species-decline-14177>.

³ Bergstrom, D, et al. (2021) “Combating ecosystem collapse from the tropics to the Antarctic”, *Global Change Biology*, 27: 1692-1702.

of its most precious natural values. Proceeding with a biodiversity offsetting system which lacks robustness and integrity is a significant risk not only to the Northern Territory's nature, but to the Northern Territory Government's reputation as an environmental regulator.

(a) The Northern Territory Government should not proceed with offsetting in the absence of key legislative and policy architecture

There are flaws with the design and implementation of the Draft Policy which may in fact facilitate biodiversity decline, rather than result in a net biodiversity gain. In particular, it is foolhardy to embark upon biodiversity offsetting in the Northern Territory in the absence of the basic legal and policy architecture for biodiversity conservation that exists in every other jurisdiction in Australia.

Specifically, the lack of:

- (a) a Northern Territory biodiversity conservation strategy;
- (b) state of the environment reporting; and
- (c) Northern Territory native vegetation management or biodiversity conservation legislation,

means that it is not currently possible to implement a robust biodiversity offsets framework.

ECNT urges the Northern Territory Government to commit to enacting native vegetation legislation, developing a Territory-wide biodiversity conservation strategy, and committing to regular state of the environment reporting against indicators and targets identified in the conservation strategy before the implementation of biodiversity offsetting in the Northern Territory.

The Northern Territory Government must also significantly increase resourcing for the Department of Environment, Parks and Water Security to be able to manage the Northern Territory's biodiversity appropriately (including through biodiversity offsetting regimes).

(b) The Draft Policy will not apply to most land clearing in the Northern Territory

As currently drafted the Draft Policy will not apply to the vast majority of land clearing in the Northern Territory, since the Draft Policy is only triggered upon referral and assessment under the *Environment Protection Act*, and then only if residual impacts are assessed to be "significant".

To the best of ECNT's knowledge, no pastoral land clearing application has ever been assessed by the NTEPA under the *Environment Protection Act* or its predecessor legislation.

Land clearing has significantly increased in the Northern Territory in recent years, particularly on the pastoral estate. Approvals for land clearing on pastoral properties have surged more than 10-fold in the past decade, rising from an average of about 1000 ha/year in 2010 to 2015, to more than 20,000 ha/year in the past 6 years.⁴ There has been an increase of 280% in the land subject to pastoral land permits this decade (2013-2022), compared with the previous decade (2003-2012). In the last 4 years (between 2018 and 2021), the amount of land subject to land clearing approvals increased by 300% in the Northern Territory. If the applications currently being considered by the Pastoral Land Board are approved in this calendar year, this would result in approximately 31,000 hectares of land being approved for clearing in 2022, representing more than a 5-fold increase in the last 5 years.

Land clearing rates are likely to increase in the near future. There are significant, and unprecedented, development pressures currently occurring in the NT. The cotton industry revealed its plans for 168,000

³ <https://theconversation.com/lets-get-this-straight-habitat-loss-is-the-number-one-threat-to-australias-species-85674>.

⁴ Beaumont T, A. Pursey, C. Booth, "A Fork in the River: the consequences of a major new cotton industry in the Northern Territory". Centre for Conservation Geography, 2022.

hectares of irrigated and dryland cotton in 2020.⁵ Construction of a cotton gin (a processing facility for cotton bales) is currently underway near Katherine which will likely spur the rapid expansion of this industry. Increased clearing of savanna is occurring to plant “improved pastures” to supply the cattle industry.

Currently, most (if not all) proposals for agricultural development on the pastoral estate would escape any requirement to compensate for the considerable impacts of their activities. It is crucial that the Draft Policy apply to pastoral and unzoned land clearing (whether through the declaration of a referral trigger under the Environment Protection Act, or amendment of the Draft Policy).

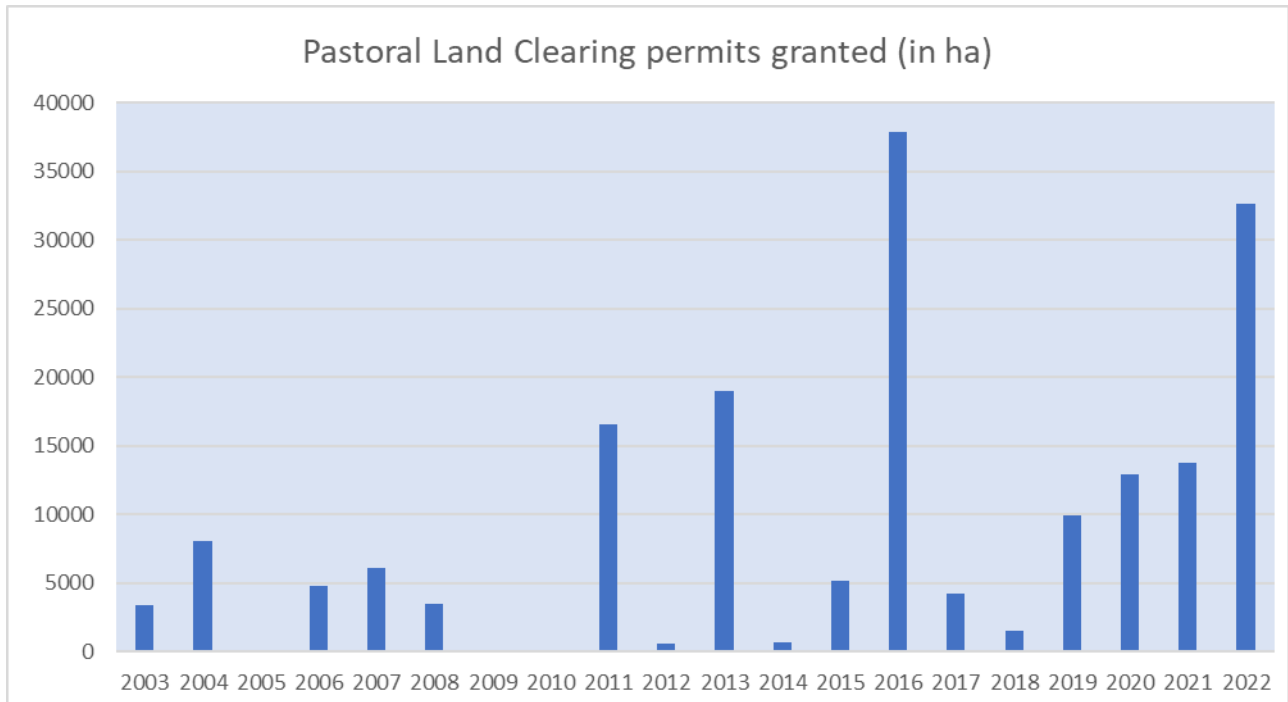


Figure 1: Area in hectares approved for clearing by the Pastoral Land Board per year. Please note the 2022 figures include permits currently under consideration by the Pastoral Land Board.

(c) The Draft Policy does not actually enshrine biodiversity offsetting

Rather than an offsets policy, the Draft Policy appears to adopt a new approach (distinguishable from offsetting) called “target-based ecological compensation”. For example, the Technical Guidelines state that “the Policy envisages that offset activities will primarily involve the management of priority threats, which are relevant to the habitat(s) in which the offset is located, and the biodiversity values which have been impacted.”

This is not offsetting, but links compensation to biodiversity targets that may or may not be equivalent to the biodiversity lost. The problem with this approach in the Northern Territory is that there are serious data and policy deficiencies which make implementation of this model very difficult, if not impossible. Specifically, it requires careful articulation of conservation targets, and a strong evidence base and monitoring system by which the activities can be measured.

While the Draft Policy and Implementation Model purport to provide targets and benchmarks, no evidence or citations are provided for why or how they are appropriate. They have not been tested with key stakeholders or the community. Nor are they anchored in a Territory wide biodiversity conservation strategy/policy or legislation (because none exists).

⁵ NT Farmers ‘Business Case for the Construction of a Cotton Gin in the Northern Territory; [60321b63d7bd4778a95579680cac25f2.pdf](https://www.ntfarmers.org.au/60321b63d7bd4778a95579680cac25f2.pdf) (ntfarmers.org.au)



Moreover, there are serious data deficiencies which make it impossible to set meaningful baselines and measurable targets for improvement.

While much of the science on the threats is clear, there is a lack of baseline data and long-term ecological monitoring in the NT to inform robust decision-making, including regarding offsetting. Patchy baseline data means that we are limited in evaluating species and ecosystem responses to changes in land use.⁶

Monitoring and evaluating patterns of change in biodiversity are essential to inform land managers, policy-makers and planners.⁷ While there is useful long-term monitoring occurring across the Parks estate, ECNT is not aware of any formalised biodiversity monitoring program occurring on the pastoral estate, where the majority of development and other threats are occurring.⁸ In combination with the failure of government decision-makers to require developers to undertake biodiversity monitoring in nearly all land clearing applications, this means that more often than not the public does not know what we are losing, and what has already been lost.

Current information gaps include:

- The 2016 Australia State of the Environment Report specifically highlighted the fact that there is no standard methodology for assessing vegetation condition in the Northern Territory, and very limited systematic assessment and monitoring of vegetation extent and condition across bioregions. ECNT has not seen evidence this lack of systematic monitoring has improved over the last 6 years.
- While there are biodiversity monitoring programs in place (including in national parks and on Aboriginal land), there is no long-term biodiversity monitoring program in place across the pastoral estate, approximately 45% of the NT's landmass.
- The NT rangelands monitoring program focuses on basic pastoral land condition (generally grass cover vs. bare ground cover) broadly across vegetation types on pastoral lands, primarily for the purposes of understanding the productivity of the land for pastoral purposes⁹. However, these coarse assessments do not correlate with assessments of the condition of the land with respect to biodiversity.¹⁰
- There is a lack of information about trends and condition of different ecosystem types across the broad vegetation groups of the NT. Territory legislation does not provide for listing ecological communities as threatened – and we lack the detailed mapping of regional ecosystems to adequately assess their extent – let alone understand the health or condition of most ecosystems.
- There is a lack of fine scale vegetation mapping. The only presently available NT wide standardised vegetation mapping is derived from the 1:1 million scale vegetation map.¹¹ Apart from a few specialised communities, the vast majority of NT vegetation communities still remain mapped at a broad scale. This scale is inappropriate for regional or catchment level planning, especially considering the increased development and modification pressures affecting the NT environment.¹²

⁶ Woinarski, J.C., Williams, R.J., Price, O.F., & Rankmore, B. (2005). Landscapes without boundaries: wildlife and their environments in northern Australia. *Wildlife Research*, 32, 377-388

⁷ Einoder, L.D., Gillespie, G.R., Southwell, D.M. and Fisher, A. (2018). Evaluation and Redesign of the Northern Territory Top End National Parks Ecological Monitoring Program. Technical Report to the Northern Territory Parks and Wildlife Commission. Flora and Fauna Division, Department of Environment and Natural Resources, Darwin.

⁸ Price, O, Drucker, A, Edwards, G, Woinarski, J, Saalfeld, K, Fisher, A, Russell-Smith, J. (2008) 'Review of threats to biodiversity in the Northern Territory'. Final report for NHT Project 2005/043. Department of Natural Resources, Environment, The Arts and Sport; School of Environmental Research, Charles Darwin University.

⁹ [About Rangelands monitoring | Department of Environment, Parks and Water Security](#)

¹⁰ Fisher A & Kutt A (2006). Biodiversity and land condition in tropical savanna rangelands: summary report. Tropical Savannas CRC, Darwin.

¹¹ Wilson BA, Brocklehurst PS, Clark MJ, Dickinson KJM (1990) Vegetation survey of the Northern Territory. Conservation Commission of the Northern Territory, Technical Report No. 49. (Darwin)

¹² P. Brocklehurst, B. Sparrow, B. Wilson, M. Clarke (2008) Scoping Paper: A finer scale vegetation map for the Northern Territory. Department of Natural Resources, Environment, The Arts and Sport

- The NT does not have an agreed set of biodiversity indicators or metrics used to underpin a publicly available reporting system on the condition and trends of the NT's biodiversity, such as through State of the Environment Reporting.¹³

It is imperative that the Northern Territory Government commit to resourcing filling these data gaps, and to implementing the legal and policy architecture for robust biodiversity conservation management in the Northern Territory. This would be crucial for the ecological compensation approach proposed in the Draft Policy to have any prospect of success or integrity.

(d) Draft Policy does not accord with accepted principles of biodiversity offsetting

ECNT is concerned that the Draft Policy does not comply with basic principles of biodiversity offsetting in key respects.

(a) The "like-for-like" principle is not incorporated

The evidence shows that, at the very least, any credible biodiversity offsets scheme must enshrine the principle of "like-for-like". In other words, gains or avoided losses should benefit the same biodiversity feature as was impacted, and should occur within the same geographical region. This is to ensure that the biodiversity values of the site being used as an offset are equivalent to the biodiversity values impacted by the proposed development. The rationale behind these constraints is to maintain the functioning of the impacted ecosystem, and to ensure that "the same community of people that loses out on a valuable biodiversity feature maintains access to an equivalent biodiversity feature."¹⁴

The Draft Policy does not enshrine "like-for-like", but a "Territory-specific approach" which permits threatening processes (fire, weeds, ferals) to be managed as compensation for biodiversity damage elsewhere. Ermagassen et al note that as flexibility increases along this dimension, the ecological communities or species targeted by the offset actions can be increasingly different from those impacted by a development activity.¹⁵ This can contribute to biodiversity declines, rather than gains, particularly in the data and policy deficient context of the Northern Territory described above.

(b) Indirect offsets are permitted

The literature also demonstrates that there should be extremely limited use of indirect offsets or supplementary measures under any offsetting regime. This allows the use of related activities, such as research, in place of directly offsetting the biodiversity loss. Indirect offsets are highly problematic, and "do not result in a conservation gain for the affected biodiversity, thereby implicitly facilitating the loss of valuable biodiversity".¹⁶

ECNT is concerned that the Draft Policy effectively proposes that all offsets would be indirect offsets. The ecological compensation model proposed (which proposes the management of weeds, fire and feral animals in place of actual offsets) suffer from key issues relevant to all indirect offsets: environmental gain is difficult to measure the relationship between the activity and the environmental gain is uncertain and contingent, the level of additionality is difficult to quantify, and it does not incorporate like-for-like offsetting.

(c) It is not clear how the overall objective of "net gain" can be achieved or measured

¹³ [State of the Environment report - DCCEEW](#)

¹⁴ Ermagassen, S., M. Maron, C. Corlet Walker, A. Gordon, J. Simmonds, N. Strange, M. Robertson, J. Bull, "The hidden biodiversity risks of increasing flexibility in biodiversity offset trades", (2020) *Biological Conservation* 252, at 2.

¹⁵ Ermagassen, S., M. Maron, C. Corlet Walker, A. Gordon, J. Simmonds, N. Strange, M. Robertson, J. Bull, "The hidden biodiversity risks of increasing flexibility in biodiversity offset trades", (2020) *Biological Conservation* 252, at 1.

¹⁶ Ermagassen, p 4. See also Australian National Audit Office, 2020.

Any offset scheme should maintain or improve environmental outcomes. That is, it must be demonstrated that there will be a net loss of biodiversity values at the development site, and a gain in biodiversity values at the offset site due to effective management activities. The total gain for biodiversity achieved through management activities must exceed the total loss.

It is crucial that offsetting mechanisms to ascertain whether this objective is met should be underpinned by an evidence-based scientific methodology, which enables the impacts of the proposed development on biodiversity to be measured and quantified so that appropriate offset sites and management activities can be objectively determined. This is necessary to determine the size of an offset site, the ecological communities and populations it should contain and any management activities that will be necessary to ensure the offset meets the relevant standard.

There is no indication of an evidence-based methodology to underpin the approach in the Draft Policy. ECNT notes, for example:

- There is no discernable way of measuring against the overarching target of a “net gain in the ecological condition of natural habitats in the Territory”;
- There is not necessarily a nexus between managing key threatening processes (weeds, fire, ferals) and the asserted “net gain in the ecological condition of natural habitats in the Territory”;
- No evidence is given for how threat management will improve the condition of habitats equivalent to the loss of biodiversity that is required to be “offset”;
- assertions are made that managing threats may improve the condition of habitats by a certain percentage, for example “this was tested through expert elicitation based on scenarios of threat management in selected habitats”, but there is no evidence to substantiate these claims;
- no evidence is provided for how the annual threat reduction costs, maintenance costs and monitoring costs have been calculated;
- no evidence is given for how priority threat benchmarks have been ascertained.

For these reasons, in addition to the absence of data to inform baselining, targets and measurements of improvements against targets outlined in the previous section, it is not possible to measure the environmental gains purported to be achieved by the Draft Policy.

(d) Additionality principle

Any offset action must be additional to what is already required by law. The requirement of additionality must be based on clear criteria to ensure that offsets are not approved unless they provide a conservation benefit additional to what would otherwise occur. ECNT is concerned that the types of activities proposed to qualify as “offsets” are likely to be very difficult to secure and maintain, and moreover that these are activities that should be required as a matter of standard environmental management practices. It is a perverse outcome that landholders or developers could benefit financially for activities they should be undertaking anyway. The Draft Policy does not satisfy the requirement of additionality.

(e) Geographic/spatial flexibility

Offset policies normally implement some constraints about where offsets need to be located relative to the impact causing the biodiversity loss. It is widely advocated that offsets should be located as close as possible to the initial impact site, so that people in the vicinity retain their access to nature and to improve the chance of ecological equivalence at levels below that of the categorical “types” of biodiversity (eg populations, genes). Ermagassen et al note that geographic flexibility in offsetting regimes can compromise

the fundamental requirement of additionality. For an offset to truly achieve a net gain, it must achieve a conservation gain that would not have happened in the absence of the activities associated with the offset.

Instead of maintaining a close geographic nexus between the area impacted and the area to be managed as an “offset”, the Draft Policy states that “offsets programs must be located within the same biome”.

There are only 3 biomes listed in the Technical Guidelines – the monsoonal north biome, arid south terrestrial biome and estuarine and marine biome. This means that there is a significant chance that that any “offsets” will not be proximate to the actual loss and will not satisfy the requirement of additionality that is essential to any offsetting regime with integrity.

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

Yours faithfully,



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