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The Queensland Government Environmental Offsets Framework Discussion Paper

North Queensland Conservation Council (NQCC) would like the comments below on the Queensland Government Environmental Offsets Framework Discussion Paper to be taken into account in all relevant decisions.

Before turning to our comments on the Framework document, we need to draw attention to our deep-seated disquiet about the concept and use of offsets. This is based on the fact that, in essence, offsets can exceedingly rarely compensate adequately for damage to the environment and very more often than not result in a net loss; while 1000 hectares of land can be reduced to sterile bare earth, a thousand bare hectares can rarely be transformed into a healthy, natural, biodiverse environment.

Too often, it is assumed, for example, that a species can 'wait' for suitable habitat to be created or that, inexplicably, similar habitat elsewhere has spare capacity to absorb greater numbers of the species.

Moreover, the increasing use of offsets to replace efforts to 'avoid' or 'mitigate' in the application/approval process means greater loss of biodiversity at a time when Australia's abysmal record of biodiversity loss is set to worsen along with the inevitable impacts of government-assisted climate change.

Added to this is the indefensible approach of approving development applications prior to the development of offset plans; an approach that would seem to make a mockery of the assessment process.

In summary, NQCC concurs with the following statements:

'Biodiversity is not fungible, it is not possible to trade it from one place to another and hope to retain its value; biodiversity is dependent on where it is in the landscape (place) and when it is (time).
Prof. Hugh Possingham, quoted in *Wildlife Australia*, Vol 50, No. 3, p.40

And, speaking of dependence:

'The economy is a totally owned subsidiary of the environment, not the other way around'.
Gaylord Nelson, (former US Senator)

With the drive to 'simplify' and so speed up the process of application for development for economic gain (often accruing to just a few), appreciation of the complexity of ecosystems – similar to the complexity of the human body – is being lost. It is tragic to see that, as human medicine is becoming more refined, human treatment of the environment is becoming, in the interests of inappropriate simplification, more and more coarse.

As is noted in the [Independent report on biodiversity offsets](#) prepared by the International Council on Mining and Metals (ICMM) and the International Union for Conservation of Nature (IUCN) (hereinafter referred to as the ICMM/IUCN report¹):

There is no one-size-fits-all approach to follow in determining a fair exchange.

This needs to become a cornerstone for the development of all policies related to the environment.

Finally, we note that, at the federal level, in response to a 12 November 2013 question to Senator Cormann (representing the Minister for the Environment in the Senate) from Senator Waters, Senator Cormann said:

The EPBC Act Environmental Offsets Policy (October 2012) was developed following detailed public submissions, interaction with scientific experts, and reviews of academic literature. The policy has been designed to ensure effective delivery of offsets based on international best practice science.

Senator Cormann noted three reports contracted by the Department relating to the effectiveness and design of offsets under the EPBC Act:

Trust for Nature (Victoria) (2008) Environmental Offsets under the Environment Protection and Biodiversity Conservation Act 1999 – Case studies – Final Report;

- Coggan, A., Whitten, S.M. and Martin, T. (2010) Landscape scale outcomes from market based instruments. Design principles for biodiversity offsets. Marine and Tropical Sciences Research Facility (MTSRF) Transition Project Final Report. Published by the Reef and Rainforest Research Centre Limited, Cairns (32pp).

- Department of the Environment (2013) Environmental offsets in Australia under the Environment Protection and Biodiversity Conservation Act 1999 - Draft paper for the OECD expert workshop on offsets

Given Senator Cormann's response, it is unclear why it is necessary to revisit the issue of Queensland's offset policy – unless to more closely align it with international best practice – or, as would appear the case, to make development at the expense of the environment easier for industry.

In addition to the above remarks and on the assumption that, lamentably, offsets will continue (at least for the while) to be used in decision-making, NQCC makes the following comments and asks that they be used to strengthen the Framework paper and any subsequent Offsets Policy.

1. The Framework needs to be brought into line with the ICMM/IUCN report, in relation to the following.

(a) Limits to offsetting

The ICMM/IUCN report recognizes, and discusses at some length, the fact that not everything – such as species extinction – can be offset.

¹ ICMM IUCN (2012) Independent report on biodiversity offsets. Prepared by The Biodiversity Consultancy. Available at: www.icmm.com/biodiversity-offsets

In contrast, the Framework paper could be seen to accept extinction of species as a possible outcome of development:

The framework will support the government's four pillar economy by reducing green tape whilst allowing important projects to proceed without losing irreplaceable and highly valuable species and other matters of environmental significance [p.1, emphasis added – all species and MES are irreplaceable],

and;

A 'Key component' of the 'financial settlements offset' is '*the risk of ... the affected species being lost...*'

Such inferences/statements need to be re-worded/changed to make it clear that **all** species and ecological communities are irreplaceable and that the loss of **any** species will not be an acceptable risk.

Even without extinction, the Framework paper leaves open to question the level of protection afforded the environment by way of terms such as 'environmental outcomes', 'conservation outcomes'. The accompanying Habitat Quality Guide Fact Sheet uses only crude criteria on which to determine environmental values.

The only attempt to define the level of outcome aspired to (in the section 'What an offset must achieve') refers only to the requirement to maintain the viability of impacted MES. Something may be viable without being healthy or resilient.

The wording needs to be strengthened in order to make clear that the aim is beyond ensuring that MES merely 'survive'.

(b) Equivalency

According to the ICMM/IUCN report:

Equivalency requires that the balance of losses and gains represents a fair exchange. This requires quantitative measurement of losses and gains to biodiversity and the scaling of compensatory gains. This includes consideration of trading systems such as like-for-like and like for better/"trading up".

And, importantly:

There is no one-size-fits-all approach to follow in determining a fair exchange.

The greatest weakness of the Framework as it currently stands is the notion of providing a set ratio of 1:4 (damage to offsets) – especially when this is, in other than specific situations, is a maximum, and when there is no minimum ratio.

As the scientific research undertaken for the Framework apparently identified, the amount of offset required to ensure the 'viability' of a species can be very much higher than this. The choice of a fixed maximum 1:4 ratio suggests that the 'science' being incorporated into this Framework is not natural science (as claimed), but political science, designed not to 'frighten' development proponents.

This overriding of environmental science is at odds with the Australian Government's Offsets Policy as cited in the Productivity Commission draft report into Major Project Development Assessment Processes, which states that suitable offsets "must [be] informed by scientifically robust information and incorporate the precautionary principle in the absence of scientific certainty".

As Pickett (2103)² found, the ratio of habitat loss to offset to allow for the survival of the green and golden bell frog (*Litoria aurea*) was 1:19. And survival also depended on close monitoring.

To set a (low) ratio for the sake of simplicity for developers is to doom many species to at least local loss, involving diminishment of the gene pool and potentially further-reaching impacts.

The ratio of habitat loss to offset needs to vary with the needs of the species/community 'impacted', not be set at a (low) fixed ratio. In addition, there should also be a (high) *minimum* ratio.

(c) Permanence

Permanence (or longevity) refers to ensuring that gains last at least as long as impacts.

Under the proposed Framework, there is no guarantee that areas set aside as offsets will not, themselves, be subject to development at a later stage. Indeed, we have recently seen that legal agreements for protection 'in perpetuity' can be ignored in the light of a development application (vide the Carmichael mine approval).

Areas with previously acknowledged high conservation value (including but not limited to National Parks, Marine Parks, Conservation Parks and Nature Refuges), as well as land previously set aside for offsets should be deemed 'no-go' areas for development.

2. Acknowledgment of the proposed review

NQCC notes the November 2013 report of the Productivity Commission into Major Project Development Assessment Processes and, specifically, the recommendation (p.213) that there be a 'dedicated and independent review of offset arrangements' at the national level, reporting in 2014.

In the light of that potential national review, the Queensland review appears to be pre-emptive.

The Queensland Framework should be held over until such time as the proposed national review has reported.

3. Staged offsets

Staging of offsets in line with development may or may not be appropriate. It is less likely to be suitable (effective) where recreation of habitat is being considered, as the habitat will inevitably need much time to become suitably established. In many cases adjacent development will sufficiently degrade the environment that staging is not appropriate.

Staging of offsets must be permitted only in case where it is deemed by experts to be appropriate.

² Pickett, EJ, Stockwell MP et al. 2013 'Achieving no net loss in habitat offset of a threatened frog required high offset ratio and intensive monitoring', *Biological Conservation*, 157 (2103) 156-162

3. Level of discretion

The proposed Framework/policy allows for a large amount of discretion at virtually all stages. This, in effect, rebuilds uncertainty into the system. It also provides the potential for undue pressure on or corruption of decision-making processes.

The level of discretion in the offset process must be limited.

4. Conflict of interest for Coordinator-General

The discretionary powers of the CG at all stages of the offset process is unacceptable; with the CG's main role being the facilitation of economic development there would exist an overwhelming conflict of interest.

Any discretionary power that is incorporated into the Framework/policy must rest exclusively with the Minister for the Environment and be exercised only on the basis of expert peer-reviewed advice in the public domain.

5. Scope for 'moral hazard'

The fact that all impacts do not have to be acknowledged at the time of application, provides an incentive for developers to avoid identifying or mentioning MES when seeking approval.

All impacts must be identified and acknowledged prior to approval being granted.

6. Calculator

As mentioned above, the formulaic approach to biodiversity is doomed to failure. One size does not fit all, and those matters not complying with the formula are destined to suffer – even to the point of extinction.

The value put on 'protected land' is insultingly low. Nature Refuges and Conservation Parks and National Parks have often had thousands of hours of care dedicated to them to protect, weed and rehabilitate them. They may have given millions of hours worth of pleasure to hundreds of thousands of people. To regard this land as 'unimproved' is ludicrous. To sell National Park to a developer (but no one else) for clearing for the paltry sum of \$5000 per hectare or a Nature Refuge for \$2500/hectare (as would be permitted under this model) would be totally unacceptable to the public.

The yet-to-be created (or made public?) calculator must allow for offset ratios suited to each species, realistic values on all land and compensation for the value of/investment in the land to/by the owner/community.

7. Corridors

While the recreation and/or maintenance of corridors in devastated environments is increasingly popular and often effective, it needs to be borne in mind that this is not always the case. Corridors can be counter-effective when they facilitate the spread of pests (flora and fauna), over-assist dominant species and/or fail to provide the aged habitat required etc.

The Framework needs to make it clear that any corridors would need to be located in the most appropriate place for the environment and the MES threatened by the development, not the most convenient for developers and state planners.. As it stands, the locating of corridors only seems to be feasible on land that is not wanted by anyone else for anything else, bringing into question their suitability.

The government needs to consider the views of experts and government and other agencies (such as, the Nature Conservation Trust of NSW) that assess the benefits and risks of corridors in specific situations and their location.

8. Empiricism

The ICMM/IUCN report emphasises the importance of 'finding out what works' and 'learning from failure'. Long-term monitoring of the outcomes of offsets needs to be scientifically rigorous and results of monitoring need to be transparent and public.

Determination of specific offsets should be undertaken in the light of the outcomes of previous offset arrangements for similar situations (species, location etc), with such information being made public.

In summary, the principles of the 2009/12 Business and Biodiversity Offsets Programme (see below), developed in Washington, DC³, would appear to provide a more robust basis for determining any Queensland Offsets Policy.

Offset principles

Business and Biodiversity Offsets Programme (BBOP) principles

(p 10 of BBOP 2012b: http://www.forest-trends.org/documents/files/doc_3101.pdf)

1. Adherence to the mitigation hierarchy: A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy.
2. Limits to what can be offset: There are situations where residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.
3. Landscape context: A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity and supporting an ecosystem approach.
4. No net loss: A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.
5. Additional conservation outcomes: A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.
6. Stakeholder participation: In areas affected by the [development] project and by the biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, including their evaluation, selection, design,

³ BBOP 2012b: http://www.forest-trends.org/documents/files/doc_3101.pdf

implementation and monitoring.

7. Equity: A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a [development] project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognised rights of indigenous peoples and local communities.

8. Long-term outcomes: The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the [development] project's impacts and preferably in perpetuity.

9. Transparency: The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.

10. Science and traditional knowledge: The design and implementation of a biodiversity offset should be a documented process informed by sound science, including an appropriate consideration of traditional knowledge.

In closing, we note with alarm that after a, by necessity, cursory look at some of the material used by the Department in developing this Framework, significant and relevant conclusions by experts in the field seem to have been ignored. We refer to, for example, the follow comments:

We find that very high offset ratios may be needed to guarantee a robustly fair exchange.... Considerations of uncertainty, correlated success/failure, and time discounting should be included in the determination of the offset ratio to avoid a significant risk that the exchange is unfavourable for conservation in the long run.

Moilanen, A et al. 2009, 'Calculating Offset ratios', *Restoration Ecology*, Vol 17, No 4, 47-78

Policies that allow habitat destruction to be offset by the protection of existing habitat are guaranteed to result in further loss of biodiversity.... Accrued biodiversity should be demonstrated before they can be used to offset biodiversity losses.

Bekessy, S.A et al. 2010, *Conservation Letters* 3, 151-158

Under some conditions offsets may simply not be appropriate. Examples of these conditions include ... overwhelming ecological uncertainty.

Bull et al. 2103 'Biodiversity offsets in theory and practice', *Fauna and Flora International*.

NQCC commends this submission to you and asks that its contents be incorporated into any Offsets Policy.



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