4 November 2021

Thank you for the opportunity to respond to the peer review of the Lizard Management Plan. The review raises several points of concern for me:

1) The applicant has made no obvious effort to pursue the RMA's prescribed first option—avoid biodiversity loss – by investigating alternative sites; instead they went straight to offsetting. Offsetting should not be a proposal's first option to manage biodiversity loss.
2) There are limits to offsetting biodiversity loss, both in efficacy and appropriateness;
3) The efficacy of any planned offsetting activities will be limited at best by the noted deficiencies in monitoring plans.

Offsetting biodiversity loss should be last resort

The RMA lays out a very clear hierarchy of obligations to protecting biodiversity – both significant and non-significant. This hierarchy, in section 5, starts with "avoiding adverse effects of indigenous vegetation clearance where practicable, and then cascading down through remedying, mitigating and finally offsetting those effects. … Offsetting should not be used as a first option, as the primary outcome should be to 'avoid' additional loss of indigenous vegetation and habitats of indigenous fauna."[1]

It is worth noting that the quote above is referring to non-significant biodiversity loss, where the decision deems offsetting acceptable if and only if avoiding is impossible.

I have seen no evidence that the FlyRide applicants have explored the avoid option; so to my mind, avoiding biodiversity loss might well be possible in the FlyRide case, by exploring other hills.

I think the applicant should explore alternate locations before asking for a resource consent and wildlife permit that involve dislocating a population of endangered lizards and 3 populations of at risk lizards. Therefore I ask the Commissioner to ask the applicant to explore other hills for a FlyRide site, and present a list of alternatives.

Offsetting biodiversity loss is inappropriate for significant biodiversity, like endangered species

Further, the recent decision in the Mackenzie goes on to say that offsetting is inappropriate for significant biodiversity. "Offsetting should only apply in relation to non-significant areas." When considering significant biodiversity and its loss, this 2021 decision makes clear that avoiding adverse effects is the only option. If avoiding is not possible, the activity must not proceed.

This echoes the Canterbury Regional Policy Statement, which has 2 important things to say about offsetting biodiversity loss.

(1) First, offsetting is only appropriate when losses are unavoidable. "Biodiversity offsets are the final step in a hierarchical process in which adverse effects on indigenous biodiversity are best avoided, then remedied, and finally mitigated. Only in the latter case should off-site biodiversity offsets be considered to deal with residual unavoidable adverse effects."[2]

[1] Mackenzie District Council Plan Change 18 Record of Decision. 12 April 2021, paragraph 72. https://www.mackenzie.govt.nz/__data/assets/pdf_file/0006/540906/MDC-PC18-Decision-Report-12-April.pdf

[2] Canterbury Regional Policy Statement (CanterburyRegionalPolicyStatement2013July2021.PDF) page 151

(2) Second, the Regional Policy Statement is crystal clear that offsetting is not always appropriate: "There will be cases where the indigenous biodiversity at risk is so significant that it should not be significantly modified or destroyed under any circumstances (other than when necessary for avoiding risks to human health and safety). There are also situations where residual effects cannot be fully compensated because the biodiversity is highly vulnerable or irreplaceable, for example where the vegetation or habitat is so rare or reduced that there are few or no opportunities to deliver an offset. In such cases offsetting cannot be considered as a means of environmental compensation for adverse effects."[3]

Moving populations will cause loss, especially for sedentary species like lizards

Finally, the Mackenzie decision notes the difficulty of moving lizard populations. The decision quotes evidence from ecologist Michael Harding as follows: "Unless the new community/habitat is created and colonised before the existing one is destroyed, there will be interim net loss of habitat for indigenous plant and animal species. This may have a significant effect on sedentary species such as lizards or robust grasshopper."[4]

In other words, shifting lizards adversely affects lizards.

When distinguishing between significant and non-significant biodiversity, I cannot conceive of a credible argument asserting that an endangered species is anything less than significant biodiversity.

If offsetting is inappropriate for significant biodiversity, as has been decided, offsetting is inappropriate for the nationally endangered rough gecko. It is questionable, at best, whether it is appropriate for the 3 at risk-declining lizard species.

Lack of confidence that a covenant would adequately compensate for the loss of rough gecko habitat

Dr Lettink acknowledges that the proposed lizard management plan will cause 'significant residual adverse effects', even taking the offsets of the present LMP into account (para 57). But a possible (but not promised) covenant might change her opinion.

My research, and that of others, makes me less optimistic than Dr Lettink that a possible covenant would benefit the rough gecko. I say this for several reasons.

1) I don't believe a possible covenant will come to fruition, if the consent is granted. Only some biodiversity compensation plans are even carried out. And those are the concrete promises, not the possible suggestions like this covenant. In a nationwide survey of resource consents that promised biodiversity compensation as an offset (like the FlyRide's LMP) Brown et al (2014)[5] found that 37.5% failed to even try to fulfil their promises to build a new habitat or otherwise compensate for the biodiversity loss. Hence there is nearly 2/5 likelihood that the applicants will not comply with the Lizard Management Plan. And there is a greater likelihood they will not deliver on the possible but not promised covenant. I wish to cast no aspersions on the Hurunui District Council, but merely reference the scientific evidence. With some students, I found the Department of Conservation has a similar, but

[3] Page 151 Canterbury RPS
[4] Same Mackenzie decision, at paragraph 84
[5] https://researchcommons.waikato.ac.nz/handle/10289/7272

slightly better, record of compliance with its promised biodiversity compensation conditions on permissions to use DOC reserve land.[6]

2) When these biodiversity compensation promises are complied with, they don't always work. Walker et al found that the promises of 'no net loss' or even 'net gain' (in the 3/5 of cases where applicants comply with promised plans) are "technically unrealistic."[7]
3) International and national research aside, Dr Lettink notes a lack of 'outcome monitoring' in the existing lizard management plan. The fact that the peer review of the LMP expresses concern at the lack of adequate monitoring for the offsetting plans inspires more doubt than confidence that the geckos will (a) survive the move, and (b) thrive and breed in their new habitat.

Recalling that the rough gecko are now nationally endangered, if my above doubts come to fruition, there won't be many rough geckos left to replace the Conical Hill population.

Suffice it to say, the possible-not-promised future covenant in no way allays my fears for the endangered rough geckos and their at risk compatriots of Conical Hill.

Therefore, I ask the Commissioner to refuse the FlyRide resource consent, and ask the applicants to look for an alternate site that will avoid harm to endangered and at risk indigenous biodiversity.

Sincerely,

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[6] https://newzealandecology.org/nzje/3320

[7] Walker, Brower, Stephens, Lee. 2009. "Why biodiversity barter fails." Conservation Letters. (https://conbio.onlinelibrary.wiley.com/doi/10.1111/j.1755-263X.2009.00061.x#:~:text=Political%20theory%20predicts%20that%20(1,administrative%20mechanisms%20to%20institutional%20dynamics)