

**BEFORE THE INDEPENDENT HEARINGS PANELS APPOINTED TO HEAR AND MAKE
RECOMMENDATIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON PROPOSED CHANGE 1
TO THE REGIONAL POLICY STATEMENT FOR THE WELLINGTON REGION**

UNDER Schedule 1 of the Resource Management
Act 1991 (the Act)

IN THE MATTER OF Hearing Submissions and Further
Submissions on Proposed Change 1 to the
Regional Policy Statement for the
Wellington Region

**STATEMENT OF REBUTTAL EVIDENCE
OF FLEUR MASEYK
ON BEHALF OF WELLINGTON REGIONAL COUNCIL
HEARING STREAM SIX – INDIGENOUS ECOSYSTEMS
13 February 2024**

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INTRODUCTION

- 1 My full name is Fleur Jennifer Foster Maseyk. I am a Conservation Scientist with The Catalyst Group.
- 2 I have prepared this Technical Rebuttal Evidence in response to questions raised by the reporting officers for Hearing Stream Six (Mr Wyeth and Ms Guest) relating to legal submissions and expert evidence lodged for Hearing Stream Six.
- 3 I have read the Expert Evidence for Hearing Stream Six that relates to these questions.
- 4 My Technical Evidence for this topic, at paragraphs 6–8, sets out my qualifications and experience as an expert.
- 5 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court’s Practice Note 2023.

RESPONSES TO QUESTIONS FROM REPORTING OFFICERS

- 6 This evidence responds to questions raised by the Reporting Officers for Hearing Stream Six relating to matters raised in legal submissions and expert evidence for this hearing stream from the Royal Forest & Bird Protection Society Inc (**F&B**), Wellington City Council (**WCC**), Wairarapa Federated Farmers (**WFF**), and Meridian Energy.
- 7 The questions that I cover in this Reply are:
 - i. Does the 10% net gain target for offsetting involve more detailed calculations and increase reliance on technical experts than not stipulating a target?
 - ii. Does the reference to 10% net gain in Policy 24A require a greater level of accuracy in loss/gain calculations than if a target is not stipulated?
 - iii. Will having to demonstrate a specified quantum for a net gain target impose greater costs on applicants?
 - iv. Is a ‘Wellington Specific Biodiversity Metric Tool’ necessary to implement Policy 24A?
 - v. Should the definition of ‘biodiversity offsetting’ in the Regional Policy Statement (**RPS**) be amended to stipulate the application of an offset requirement to ‘more than minor residual adverse effects’ (as per the National Policy Statement for

Indigenous Biodiversity (**NPS-IB**) or is a different threshold required to trigger offsetting requirements in different situations?

8 My responses to these questions are set out in the following sections.

Net gain targets

9 This section responds to questions set out at i–iii of paragraph 7.

10 Designing a biodiversity offset requires the use of an accounting system to evaluate the adequacy of exchange – that is, whether the anticipated gains attributable to the offset action(s) are sufficient to at least balance the described biodiversity losses across type, amount, space, and time. Accounting for biodiversity across type, amount, and time necessitates a numerical framework, regardless of whether the objective is no net loss, non-specified net gain, or a specified net gain target. Thus, the net gain target itself does not drive the necessity for calculations and the use of technical experts.

11 Further, the required level of detail of calculations is influenced by the complexity and value of the indigenous biodiversity subject to residual adverse effects due to development (i.e., the biodiversity elements for which an offset is required) rather than the quantum of the net gain target.

12 However, there are inherent challenges associated with biodiversity offsetting. Biodiversity offsetting requires a prediction of a future state (the change in biodiversity values due to the implementation of offset actions), which creates inherent uncertainties. Biodiversity offset models that are poorly designed, poorly applied, or poorly interpreted can result in adverse biodiversity outcomes. This is particularly likely where uncertainties and assumptions associated with the models are obscured¹. This highlights the importance of adhering to good practice in model development and offset design.

13 Biodiversity offset models need to be ecologically robust, transparent, repeatable, account for time-lag, and use appropriate data inputs. Uncertainties and model limitations need to be clearly communicated and accounted for in offset design. Thus, suitably qualified experts are required to design and transparently document offset proposals, which should

¹ See for example, Corkery I, Barea LP, Giejsztowt J, Maseyk FJF, Mealey C 2023. Poorly designed biodiversity loss-gain models facilitate biodiversity loss in New Zealand. *New Zealand Journal of Ecology* 47(1):3548.

be subject to peer review. These requirements hold regardless of the objective for an offset (no net loss, unspecified net gain, or a specified net gain target).

14 Policy 24A does not require a 10% net gain as a hard target that must be confirmed, but it does require a net gain to be reasonably demonstrated. Therefore, it is my opinion that the risk of poor biodiversity outcomes from the application of offset models is not increased by Policy 24A.

15 Further, in my opinion, the wording of Policy 24A does not require a level of technicality or accuracy greater than no net loss or general net gain objectives.

16 The costs associated with loss-gain calculations can be expected to be the same regardless of the objective (no net loss or net gain). This is because, as I describe above, the rigour required to describe and calculate losses and gains is the same regardless of the objective. However, the amount of biodiversity gain required (to balance or exceed losses) will differ based on the objective – that is, enough gain to reach a no net loss outcome, a general net gain outcome, or a specific net gain target. This may lead to additional costs for applicants if more effort and investment is required to implement the appropriate offset actions to generate the amount of biodiversity gain necessary to achieve the objective.

Biodiversity offsetting metrics

17 This section responds to the question set out at iv of paragraph 7.

18 Biodiversity offset loss-gain models require a currency to create a common value. To do this, currencies use metrics to describe how much of what is exchanged in a biodiversity offset trade. The use of a common value enables the condition (quality and quantity) of biodiversity at both impact and offset sites to be described and then compared.

19 Metrics describe and measure the elements of biodiversity subject to the offset exchange and allow effects to be quantified in standard units specific to each biodiversity element. For example, population size, number of individuals, number of breeding pairs, percentage cover of canopy species, etc.

20 It should also be noted that metrics, models, and decision-support tools assist in the design and implementation of offsets but, in of themselves, metrics are not a substitute for policy frameworks.

- 21 Currently, there is no standard metric specifically to describe biodiversity value for the purposes of biodiversity offsetting in New Zealand. However, (as an example) the biodiversity offset accounting system (freely available on the Department of Conservation web site²) uses a flexible approach to demonstrating no net loss or net gain using a disaggregated area by condition currency. As such, it does not require specific biodiversity metrics and any ecologically robust metrics suitable to describe and measure biodiversity can be used, including for biodiversity found in the Wellington Region.
- 22 There may be value in investigating the feasibility of developing a Wellington-specific metric for the purposes of implementing biodiversity offsetting in the region, and whether the level of investment required would add value over current or emerging national tools. In the meantime, robust and peer reviewed tools to assist with offset design are available. New Zealand-specific biodiversity offsetting models also continue to be developed, and improved decision-support tools can be expected to emerge in the future.
- 23 It is my opinion that implementation of Policy 24A is not hindered by the lack of a Wellington-specific biodiversity metric.

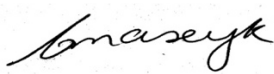
Definition for biodiversity offsetting

- 24 This section responds to the question set out at v of paragraph 7.
- 25 General definitions of biodiversity offsetting describe the concept, key components, and objective of biodiversity offsetting, leaving it to policies to define the magnitude of adverse effects on biodiversity that trigger offset requirements.
- 26 The National Policy Statement for Indigenous Biodiversity (NPS-IB) differentiates between biodiversity within significant natural areas (SNAs) and outside of SNAs when directing the requirement to address adverse effects on biodiversity via the effects management hierarchy. Outside of SNAs any *significant* adverse effect on indigenous biodiversity must be managed by applying the effects management hierarchy. Within SNAs certain adverse effects are to be avoided, while *any* other adverse effects on an SNA are to be managed by applying the effects management hierarchy (subject to the exceptions set out in clause 3.11 of the NPS-IB).

² <https://www.doc.govt.nz/about-us/our-policies-and-plans/guidance-on-biodiversity-offsetting/biodiversity-offsets-accounting-system/>

- 27 The NPS-IB embeds a threshold ('more than minor residual adverse effects') at which offsetting is required in both the definition of biodiversity offsetting and the definition of the effects management hierarchy. Therefore, once the application of the effects management hierarchy has been triggered and residual adverse effects remain (after sequential application of the avoid, minimise, and remedy steps), the requirements for biodiversity offsetting apply to all more than minor residual adverse effects, regardless of the biodiversity elements that are impacted.
- 28 Therefore, the trigger for the application of the effects management hierarchy is left to policy direction, but once an application is within that process, the NPS-IB applies a blanket prescription ('more than minor') as to the threshold of residual adverse effects which an offset must target.
- 29 Theoretically, what constitutes as a 'more than minor' adverse effect will be influenced by attributes of the biodiversity of concern for which the offset is sought (e.g., its value, vulnerability, or conservation concern) and the consequence of those residual adverse effects.
- 30 In my opinion, the 'more than minor' threshold could be included within the RPS definitions without compromising Policy 24A. I note that different thresholds triggering the need to apply the effects management hierarchy for different situations and different types of biodiversity can still be incorporated within plan policies.

DATE: 13 February 2024



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