

BEFORE THE WAIPĀ DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Plan Change 20 – Airport Northern
Precinct Extension to the Operative Waipā
District Plan

REBUTTAL STATEMENT OF EVIDENCE OF JOSHUA ANDREW MARKHAM

(GENERAL ECOLOGY – OFFSET & COMPENSATION)

10 March 2023

Counsel acting:
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INTRODUCTION

1. My name is Joshua Andrew Markham, I am a Principal Ecologist at Tonkin & Taylor Ltd (T+T).
2. My qualifications and experience were set out in my Primary Statement of Evidence dated 28 February 2023. I repeat the confirmation in my Primary Statement of Evidence that I have read and agree to comply with the Code of Conduct for Expert Witnesses.
3. In this statement of rebuttal evidence, I respond to the evidence of Ms Thurley on behalf of the Director-General of Conservation (“DOC”), specifically paragraph 13.5.
4. The fact that this rebuttal statement does not respond to every matter raised should not be taken as acceptance of all matters not responded to. I have focussed this rebuttal statement on the key points of difference that warrant a response.

RESPONSE TO MS THURLEY FOR THE DEPARTMENT OF CONSERVATION

5. In summary, Ms Thurley disagrees that the Biodiversity Compensation Model (BCM) is reputable compensation decision making tool. Ms Thurley states it has not been published, subjected to peer review, lacks transparency, has high sensitivity to input error and has meaningless structure of output. Consequently, Ms Thurley disagrees that the preliminary compensation package is adequate.
6. In general, I disagree with the above comments raised by Ms Thurley and step through these reasons below.
7. I consider that that the BCM is a reputable tool which is now used across New Zealand and has been downloaded for use by approximately 60 ecology practitioners from ten different organisations. The BCM has been used and accepted and supported in Environment Court¹ and council hearings,² and including in the recent Plan Change 5 – Peacocke Structure Plan decision³ (specifically sections 8.4 and 8.7).
8. I disagree with Ms Thurley’s comment regarding the BCM tool not being published or subject to peer review. A peer reviewed BCM foundation paper was published in the Resource Management Journal⁴ (RMJ – Official Journal of the Resource Management

¹ Te Ahu a Turanga: Manawatu Tararua Highway Project – ENV-2020-WLG-000014

² Auckland Regional Landfill – Auckland Council v Waste Management NZ Limited – BUN60339589 and Plan Change 5 – Peacocke Structure Plan.

³ <https://storage.googleapis.com/hccproduction-web-assets/public/Uploads/Documents/Content-Documents/Property-Rates-and-Building/PC5-Peacocke-Structure-Plan/Decisions/Commissioners-Decision/Decision-following-the-hearing-of-Submissions-on-Plan-Change-5-Peacocke-Structure-Plan.pdf>

⁴ The use of modelling for terrestrial biodiversity offsets and compensation: a suggested way forward, M. Baber, M. Christensen, J. Quinn, J. Markham, G Kessels, G Ussher and R. Signal-Ross. Resource Management Journal, April 2021.

Law Association of New Zealand Inc. (RMLA) with the reviewed and tested Biodiversity Compensation Model User Guide⁵ and the BCM tool released in October 2021. Both the Foundation BCM journal publication, BCM User Guide and BCM tool have gone through robust and significant reviews and testing prior to publication and release. In order to appropriately transition from the Biodiversity Offset Guidance document⁶ to the BCM, three of the same authors were used.

9. In contrast to Ms Thurley’s point of view, I believe that the BCM User Guide provides a high degree of scientific robustness, repeatability, and transparency with clear meaningful structure of output. The BCM is a decision-making tool, just like any other model, in which inputs can be transparently tested with full technical justification provided. I consider the BCM is a significant step forward when compared to sole reliance on professional opinion, use of compensation multipliers, or “horse trading” via negotiations between professionals or stakeholders.
10. As stated in para 58 of my EIC, the BCM has been used to test “or sense check” if compensation actions are likely to result in no net loss of biodiversity value by aiming for a net gain biodiversity outcome. I note that Ms Thurley doesn’t refute the justification given in my EIC for the use of compensation for long-tailed bats. Therefore, in the absence of any other compensation decision making tool or other appropriate compensation tool put forward by Ms Thurley, I consider that the BCM to be the most reliable, transparent, and robust approach as it:
 - (a) allows for both quantitative and qualitative information.
 - (b) accounts for time lags (i.e. the time required for vegetation to establish).
 - (c) includes built in contingencies for
 - i. biodiversity risk;
 - ii. impact uncertainties; and
 - iii. confidence that no net loss in biodiversity value will be achieved by using a predicted net gain threshold of 10%.

⁵ A Biodiversity Compensation Model for New Zealand, A User Guide (V.1). Authored by M. Baber, J. Dickson, J. Quinn, J. Markham, G. Ussher, S. Heggie-Gracie, S. Jackson. Prepared by Tonkin & Taylor Ltd, 2021.

⁶ Biodiversity Offsetting under the Resource Management Act, A guidance document. Authored by F. Maseyk, G. Ussher, G. Kessels, M. Christensen, M, Brown. September 2018.

11. A preliminary assessment of the expected residual effects has been provided in my evidence. I still consider that it is appropriate for the final details of the compensation to be provided and approved at resource consent stage through the EMP (including the BMP) as required by rule 10.4.2.14B. I reiterate the opinion that I expressed in my EIC that the preliminary assessment of the compensation package, combined with the conditional purchase of the proposed compensation site by the applicants, provides a higher level of confidence in the likely compensation actions than may otherwise typically exist at this point in a plan change process.
12. In conclusion and based on further information provided above, I believe that the BCM decision making tool is the most reliable, transparent, and robust method of determining an appropriate compensation package. The compensation will be addressed in further detail at the resource consent stage, as required by rule 10.4.2.14B.

Joshua Andrew Markham

10 March 2023