IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a joint Hearing for Resource Consent

Applications by McPherson Resources Ltd

STATEMENT OF EVIDENCE OF MATTHEW JOHN VARE

For the Waikato Regional Council

DATED 23 November 2020

---

1 Introduction

1.1 My name is Matthew Vare. I am a Senior Policy Advisor in the Integration and Infrastructure Section at the Waikato Regional Council. I have been in this role since June 2008.

1.2 I hold a Masters in Social Science and a Post Graduate Diploma in Resource and Environmental Planning.

1.3 My evidence is given on behalf of Waikato Regional Council (Science and Strategy Directorate). My role within that Directorate has been as a member of the Policy Implementation Team which involves working with the territorial authorities of the Waikato Region and with neighbouring regional councils to assist in the development of consistent integrated regional policy and to ensure that the Regional Policy Statement is given effect to.

1.4 I have 26 years planning experience in local, regional, and central government. In all of these roles I have been involved in the development of, and submissions to, plan provisions and resource consents in relation to biodiversity management. I prepared the biodiversity provisions of the RPS which became operative in 2016.

1.5 I confirm that I am familiar with the Code of Conduct for Expert Witnesses as set out in the Environment Court Practice Note 2014. I have read and agree to comply with the Code. Except where I state that I am relying upon the specified evidence or advice of another person, my evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2 Scope of Evidence

2.1 Waikato Regional Council made submissions to Waikato District Council land use consent LUC0123/19 on 30 June, 2020.

2.2 Waikato Regional Council's submission highlighted two main areas of concern. Firstly, that the loss of 2.08 ha of kanuka dominated forest within the SNA could have more than minor adverse effects in achieving the objectives of the Waikato Regional Policy Statement (RPS), and secondly, we identified the presence of kauri in close proximity to the site and the need for measures to be put in place to manage potential adverse effects from kauri dieback disease (*Phytophthora agathidicida*).

2.3 My evidence reinforces the Waikato Regional Council submission and reflects my professional opinions as a resource management policy advisor. I rely on the evidence of Dr Paul Dutton (Ecologist), in terms of the adequacy of the proposed mitigation and/or offset

measures for loss of the Significant Natural Area and proposed ecological resource consent conditions provided in the S42A reports by both councils. I also rely on the advice of Kim Parker (Biosecurity Officer – Kauri Dieback) in terms of the proposed consent conditions to manage this particular issue.

2.4 I have read the s42A reports prepared by Waikato District Council and Waikato Regional Council.

2.5 Both Regional and District Councils have functions under the RMA to manage indigenous biodiversity, though with slightly different emphasis. To achieve integrated management, it is necessary to ensure that these functions are well aligned. Method 4.2.11 of the RPS states that territorial authorities are responsible for the control and use of land to maintain indigenous biodiversity, excluding land in the coastal marine area and the beds of lakes and rivers, which is the responsibility of the Regional Council.

3. Indigenous Vegetation Clearance and RPS Objectives, Policies and Methods

3.1 The proposal includes vegetation clearance of 2.45ha of kanuka-dominant forest which is identified and mapped as a Significant Natural Area (SNA), with 2.08ha of this SNA to be cleared within stage 1. It is my understanding that stage 1 will occur within a 10 year timeframe, and that the removal of vegetation from the SNA will actually commence within one year of consent being granted.

3.2 As noted in our submission, the RPS (Objective 3.19 and Chapter 11) addresses the maintenance of indigenous biodiversity and the protection of significant indigenous vegetation and significant habitats of indigenous fauna.

3.3 RPS Objective 3.19 seeks that the full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state. The RPS sets out policies that address all indigenous biodiversity (11.1), and significant indigenous vegetation and significant habitats of indigenous fauna (11.2).

3.4 Policy 11.1 guides Waikato Regional Council and territorial authorities to maintain or enhance all indigenous biodiversity, with an emphasis on working towards achieving no net loss at a regional scale (Appendix 1). To assist implementation of this policy, Method 11.1.3 seeks that district and regional plans avoid, remedy or mitigate adverse effects first, before promoting offsetting (Appendix 2). The Method states that biodiversity offsets should be *promoted* as a means to achieve no net loss on a project level, where *significant residual adverse effects* are unable to be avoided, remedied or mitigated.

3.5 Policy 11.1 and its subsequent methods are relevant to that area of indigenous vegetation and habitat within the subject site that is not significant but still important as part of the overall biodiversity asset of the district, and which will be cleared as a result of activities on site. It is not clear whether this loss of biodiversity has been adequately mitigated and/or offset as part of the application.

3.6 RPS Policy 11.2 has perhaps the most relevance for this proposal. This Policy states that:

> *Policy 11.2 Protect significant indigenous vegetation and significant habitats of indigenous fauna*
>
> *Significant indigenous vegetation and the significant habitats of indigenous fauna shall be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced.*

This policy is mirrored by Waikato District PDP Policy 3.2.2 b). The PDP policies were notified on 18 July, 2018 and have legal effect.

3.7 To assist implementation of this policy, Method 11.2.2 (Appendix 4) presents a more directive approach to achieving no net loss of areas of significant indigenous biodiversity than Method 11.1.3. This is consistent with s6(c) of the RMA which requires protection of such biodiversity. The Method seeks avoidance of adverse effects as the most effective means of protecting areas of significant indigenous vegetation and significant habitat of indigenous fauna. It recognises that some loss of or damage to those areas may be unavoidable and in those cases remediation and mitigation is required. Where adverse effects remain after avoidance, remediation and mitigation then more than minor adverse effects are required to be offset. Waikato District PDP Policy 3.2.3 gives effect to this RPS direction as does PDP policy 3.2.4 on biodiversity offsetting.

3.8 When applying Method 11.2.2, the expectation is that proposals should reasonably demonstrate that no net loss has been achieved using methodology that is appropriate and commensurate to the scale and intensity of the adverse effects. The application of biodiversity offsetting will be determined on a case by case basis through the decision-making processes.

3.9 As noted above, RPS method 11.2.2 seeks avoidance of adverse effects as the most effective means of protecting areas of significant indigenous vegetation and significant habitat of indigenous fauna. The WRC s42A report (p23) states:

"it is unclear whether the proposed loss of SNA and stream reclamation are unavoidable, avoidance is more consistent with RPS policy."

I note that this is questioned in evidence by the applicant's planner and that at para 4.5 of that evidence example is given of where some avoidance of SNA has occurred within stages 2 and 3 of the proposal but not in stage 1 where the largest loss is proposed to occur.

4.0 Mitigation Hierarchy and Biodiversity Offsetting

4.1 In my view the PDP policy 3.2.3 also requires that the mitigation hierarchy be enforced and that there is uncertainty around whether the proposal is consistent with this policy. The consent application as it relates to matters of biodiversity seems to include a bundle of mainly mitigation and compensation actions. There does not seem to have been any application or assessment of biodiversity offsets, consistent with PDP Policy 3.2.3 and 3.2.4.

4.2 To "mitigate" means to alleviate or moderate the severity of something. Biodiversity offsets seek to achieve biodiversity gains that are equivalent to the residual biodiversity losses. As we move along the continuum of responses from avoidance through to offsetting (and then to compensation), certainty about achieving successful outcomes for biodiversity decreases at each step along that continuum.

4.3 The Ecological Management Plan (Ecology NZ, 16 October, 2019) states at 3.1 "Compensation has been chosen as the mechanism to address the 2.45ha of indigenous vegetation clearance on site. The proposed means of compensation has been primarily founded on a qualitative outcome-based approach."

4.4 Environmental compensation is designed to compensate for losses but it is not designed to demonstrate a no net loss outcome, and therefore does not have to fully account for and balance losses and gains. Environmental compensation carries the greatest risk for biodiversity outcomes and is the last resort in the effects-management hierarchy. The biodiversity policies of the RPS and the PDP both seek that biodiversity offset be followed as part of the effects hierarchy.

4.5 The WRC submission sought further certainty of outcome for ecology and in my view this would be provided by rigorously applying the best practice offsetting principles to this

proposal. Biodiversity offsetting under the RMA[1] provides an appropriate framework to ensure that best practice is followed as part of consent applications and consent compliance. The guidance was developed to contribute to conservation efforts at national, regional, and local level. Adherence to the biodiversity offsetting guidelines will help to slow the decline in indigenous habitat cover which is central to maintaining indigenous biodiversity. It will also assist to give effect to the biodiversity policies in the RPS and enable consistency with the biodiversity policies of the PDP.

4.6 In his evidence Dr Dutton has outlined whether the key steps and information needs as part of the biodiversity offset design process have been followed adequately, leaving questions around whether the certainty of biodiversity loss at the site can be effectively offset.

5.0 AECOM Recommendations and outstanding issues

5.1 The WRC submission stated that "WRC technical staff have assessed and largely concur with the recommendations outlined by AECOM in their ecological review dated 31 January 2020[2]." I note that in his evidence Dr Dutton also reviews and largely concurs with the subsequent recommendations from AECOM in relation to submissions dated 12 October, 2020[3].

5.2 The key outcome sought from our submission was to achieve greater certainty of outcome for ecology at the site through robust, science-based conditions of consent. To this end I rely on the evidence presented by Dr Dutton. While largely agreeing with the advice and recommendations provided by AECOM, Dr Dutton has raised the following valid concerns:

1. Is the scale and dimensions of the ecological corridor (i.e. 4.56ha with 100m width) sufficient to offset adverse effects from the current proposal, from the historic losses deemed to be outside of existing use rights (as outlined by Waikato DC s42A report, p37), and the ongoing loss of biodiversity at the site over the period 2017-2020 outlined by Dr Dutton in his evidence.
2. Has enough consideration been given to the "time lag period" that it will take for offset/compensation planting to provide the same ecological functioning and value as the vegetation that is to be removed especially as removal of SNA is sought within 1 year of gaining consents?

[1] Biodiversity Offsetting under the Resource Management Act: A Guidance Document. September, 2018.
[2] Ecological Review – McPherson Quarry Ecological Impact Assessment (EcIA) and Ecological Management Plan (EMP), AECOM, 31 January, 2020.
[3] Specialist Ecological Input – Consideration of Ecological Submissions in relation to McPherson Quarry Ecological Impact Assessment (EcIA) and Ecological Management Plan (EMP), AECOM, 12 October, 2020.

3. Has enough consideration been given to the make-up of the compensation planting and is it sufficiently "like for like" in terms of species composition and context?
4. Is there sufficient ecological baseline information for Area A (impact site)? Are the monitoring methods that have been employed to date robust enough to ensure appropriate mitigation/offsetting for the ecological corridor (offset site), and is there enough time to enable appropriate ecological baselines to be determined given proposed SNA removal within 1 year?
5. What level of certainty is provided to ensure compliance with ecological consent conditions and that monitoring confirms key ecological targets (outcomes) and thresholds are being met? What if monitoring shows some methods have been ineffective or there is non-compliance?
6. What is the overall efficacy of the range of other ecological mitigation methods that have been identified to mitigate/offset for ecological impacts?

5.3 I refer to the WDC S42A report para 140 which states that the AECOM review *"considered that the magnitude of effect on terrestrial habitats and associated fauna (bats, birds) is greater than the Ecological Impact Assessment indicates. However, it is considered that the habitat linkage that will be provided by the northern corridor could provide ecological benefits that are not currently present on site (connectivity), if delivered appropriately"*. (Emphasis added).

5.4 Dr Dutton has outlined the uncertainty that still exists around delivering sound outcomes for biodiversity. This can be overcome by strict adherence to the key steps and information needs for biodiversity offset design process (Appendix 5 Dr Dutton's evidence). It also requires some amendment to consent conditions particularly around recording offset specification in an ecological enhancement and monitoring plan and ensuring compliance with standards and/or conditions. It also requires amendment to include monitoring conditions to confirm ecological targets and thresholds are being met and regular reporting to council(s) to confirm (or otherwise) no net loss trajectory, and to enable adaptive management responses to be employed if necessary.

5.5 In Dr Dutton's view these matters are covered by the suggested conditions 39 and 40 Habitat Monitoring Plan as outlined in WRC S42A Report but with his suggested amendments.

6. Kauri dieback disease

6.1 The other key part to WRC submission was the identification of the presence of Kauri within 50m of the proposed stage 1 clearance site and the potential risk of spread of kauri dieback disease. Kauri dieback disease poses a significant threat to the survival of kauri trees and forests. It is caused by a microscopic soil-borne organism called *Phytophthora agathidicida*. There is no cure for kauri dieback disease, once a tree is infected nearly all will die prematurely. The best management to protect against this organism is to stop the movement of this organism through potentially contaminated soil[4]. Therefore, the WRC submission sought measures to be included in consent conditions to stop transmission of the pathogen and control its spread.

6.2 The review of ecological submissions by AECOM addresses and supports this issue being managed, noting that "given the presence of Kauri trees within the surrounding landscape and the soil disturbance that will occur within the project footprint, it is considered that precautional measures must be implemented."

6.3 Both S42A reports have canvassed this issue and requested conditions of consent be provided. The incorporation of kauri dieback hygiene protocols into the quarry operations is considered appropriate by their supporting ecologist. WRC Schedule One General Conditions 41-43 have been proposed to manage this issue. Miss Parker has assessed these conditions and supports their inclusion, subject to the following amendments:

Condition 41. If Kauri, including their potential contamination zone defined as three times the radius of the canopy dripline,[5] is identified within 50 metres~~,~~ of the future overburden stripping area, a vehicle and equipment hygiene procedure shall be adopted including the following:

a) Define the ~~individual kauri~~ potential contamination zones comprising either individual kauri trees or stands of kauri trees, from the outer edge of their defined potential contamination zone ~~kauri management stands~~ that will be affected by the land or soil disturbance, and avoid activities within this described area wherever possible, otherwise;

b) Divert overland flows away from the potential contamination zone,

c) Establish entry and exit routes from each potential kauri contamination zone,

[4] See www.kauridieback.co.nz

[5] See Appendix 5 for explanation

d) Establish the on the ground infrastructure necessary to ensure that all vehicles and equipment are cleaned to be free of soil and organic material, or changed for clean gear before moving into, out of, or between kauri contamination zones,

e) Use inspection and cleaning checklists for each kauri contamination zone and for all equipment and personnel, and retain these records on-site for Council inspection, and

f) Do not transport ~~S~~soil ~~and~~ or organic material from within a potential kauri contamination zone to outside a potential kauri contamination zone or vice versa, unless disposing to landfill. ~~organic material retrieved from cleaned vehicles and equipment must be either retained within the kauri contamination zone from which it originated, or else retained within the Whangapoua Quarry site.~~

g) Earthworks within a potential contamination zone should be undertaken during dry soil conditions to reduce equipment contamination and make cleaning easier.

***Advice Note:** A kauri management stand is a group of kauri where the kauri contamination zones overlap and is treated as one potential kauri contamination zone.*

Condition 42. Soil and organic material stripped from kauri contamination zones must be either retained within the kauri contamination zone from which it originated, or else retained within the quarry site.

Machinery

Condition 43. The consent holder shall ensure that all machinery used in the exercising of this consent is cleaned prior to being transported to the site to ensure that all soil, seed and/or plant matter has beening removed and documented in accordance with the National Pest Control Agencies A series, best practice (Code A16) guidelines, available to download from https://waikatoregion.govt.nz/assets/WRC/Services/plant-and-animal-pests/Keepitclean.pdf. and when operating within proximity of potential kauri contamination zone adhere to https://www.kauridieback.co.nz/media/1464/best-practice-guidelines-vehicles-and-heavy-machinery-hygiene.pdf.

6.4 In addition to these consent conditions, the applicant should remain aware of the potential implementation of the National Pest Management Plan (NPMP), currently in draft form which has specific kauri dieback management plan requirements linked to earthworks – see

https://www.kauridieback.co.nz/media/1901/npmp-proposal-for-consultation-18022019.pdf

7. Conclusion

7.1 WRC concerns around the presence of Kauri and the imposition of measures to control spread of kauri dieback disease have been accepted by both AECOM and the applicants ecologist and the draft consent conditions recommended by WRC S42A Report have been assessed as adequate by WRC technical (biosecurity) staff with some amendments.

7.2 WRC concerns around improved certainty of outcome for ecology have not been adequately addressed. In my view, RPS and PDP policies and methods around enforcing the mitigation hierarchy in general, and assessing or applying biodiversity offsetting in particular, have not been met.

7.3 In his evidence, Dr Dutton outlines the need for the ecological compensation measures regarding terrestrial ecology to be assessed against the biodiversity offset principles and key steps. He also outlines key conditions of consent around ecological monitoring, compliance and reporting, and adaptive management that are critical to ensure biodiversity outcomes are achieved.

Matthew Vare

23 November 2020

Appendix 1: RPS Policy 11.1 Maintain or enhance indigenous biodiversity

Promote positive indigenous biodiversity outcomes to maintain the full range of ecosystem types and maintain or enhance their spatial extent as necessary to achieve healthy ecological functioning of ecosystems, with a particular focus on:

a) working towards achieving no net loss of indigenous biodiversity at a regional scale;

b) the continued functioning of ecological processes;

c) the re-creation and restoration of habitats and connectivity between habitats;

d) supporting (buffering and/or linking) ecosystems, habitats and areas identified as significant

indigenous vegetation and significant habitats of indigenous fauna;

e) providing ecosystem services;

f) the health and wellbeing of the Waikato River and its catchment;

g) contribution to natural character and amenity values;

h) tāngata whenua relationships with indigenous biodiversity including their holistic view of ecosystems and the environment;

i) managing the density, range and viability of indigenous flora and fauna; and

j) the consideration and application of biodiversity offsets.

Appendix 2: RPS Method 11.1.3 Avoidance, remediation, mitigation and offsetting (for indigenous biodiversity that is not significant)

Regional and district plans:

a) for non-significant indigenous vegetation and non-significant habitats of indigenous fauna (excluding activities pursuant to 11.1.4):

i) shall require that where loss or degradation of indigenous biodiversity is authorised adverse effects are avoided, remedied or mitigated (whether by onsite or offsite methods).

ii) should promote biodiversity offsets as a means to achieve no net loss of indigenous biodiversity where significant residual adverse effects are unable to be avoided, remedied or mitigated.

iii) when considering remediation, mitigation or offsetting, methods may include the following:

i. replacing the indigenous biodiversity that has been lost or degraded;

i. replacing like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);

ii. the legal and physical protection of existing habitat;

iii. the re-creation of habitat; or

iv. replacing habitats or ecosystems with indigenous biodiversity of greater ecological value.

b) for significant indigenous vegetation and significant habitats of indigenous fauna Method 11.2.2 applies.

Appendix 3: RPS Policy 11.2 Protect significant indigenous vegetation and significant habitats of indigenous fauna

Significant indigenous vegetation and the significant habitats of indigenous fauna shall be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced.

Appendix 4: RPS Method 11.2.2 Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna

Regional and district plans shall

a) protect areas of significant indigenous vegetation and significant habitats of indigenous fauna;

b) require that activities avoid the loss or degradation of areas of significant indigenous vegetation and significant habitats of indigenous fauna in preference to remediation or mitigation;

c) require that any unavoidable adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna are remedied or mitigated;

d) where any adverse effects are unable to be avoided, remedied or mitigated in accordance with (b) and (c), more than minor residual adverse effects shall be offset to achieve no net loss; and

e) ensure that remediation, mitigation or offsetting as a first priority relates to the indigenous biodiversity that has been lost or degraded (whether by on-site or offsite methods). Methods may include the following:

i) replace like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);

ii) *involve the re-creation of habitat;*

iii) develop or enhance areas of alternative habitat supporting similar ecology/significance; or

iv) involve the legal and physical protection of existing habitat;

f) recognise that remediation, mitigation and offsetting may not be appropriate where the indigenous biodiversity is rare, at risk, threatened or irreplaceable; and

g) have regard to the functional necessity of activities being located in or near areas of significant indigenous vegetation and significant habitats of indigenous fauna where no reasonably practicable alternative location exists.

Appendix 5: Graphic describing the kauri root zone (three times the radius of the canopy dripline): from Kauri Dieback National Programme information