

**BEFORE THE HEARING PANEL  
FOR THE GORE DISTRICT COUNCIL PROPOSED DISTRICT PLAN**

**UNDER** the Resource Management Act 1991

**IN THE MATTER** Hearing Stream 10 - Biodiversity

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**RESPONSE TO SUPPLEMENTARY STATEMENTS ON MINUTE 41, FROM  
ANDREW PETER WELLS  
ON BEHALF OF GORE DISTRICT COUNCIL  
ECOLOGIST  
03 April 2025**

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## Introduction

- [1] The Hearing Panel has received supplementary statements from the Department of Conservation (**DOC**) and Stoney Creek Station on the information provided by the Council ecologist and planner pursuant to Minute 41. The supplementary statements are from Juzah Zammit-Ross, Elizabeth Williams, Ceri Warnock and Claire Perkins.
- [2] I have reviewed the above statements.
- [3] My Hearing Stream 10 evidence sets out my qualifications and experience as an expert in terrestrial ecology. 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.

## Response to DOC Supplementary Evidence

### Determining significant adverse effect of indigenous vegetation clearance in Areas A, B, C and D in the Hokonui Hills

- [4] The factors contributing to Mr Davis's and my assessment of the relative value of SIVA at Stoney Creek (Areas A and C) are outlined at the top of page 3 of the Wildlands response to Minute 41:

*"At Stoney Creek Station, Areas A and C were both classed as SIVA, but Area C was assessed as having higher ecological values in which lower permitted clearance limits were necessary to avoid significant adverse effects. These higher values relate to a more advanced successional stage, and considerably lower abundances of exotic weeds in the canopy/subcanopy tiers and exotic pasture species in the groundcover tier."*

These factors reflect the degree of indigenous condition and character of the vegetation and habitat within SIVA. The presence of At Risk plants in some areas is also noted as contributing to the assessment.

- [5] The same factors were applied in identifying the value of Area D at Wantwood Station, with additional consideration given to the presence of desert broom and kōwhai and rocky outcrops. This is outlined in the analysis contained in Appendix 3 of the Wildlands response. For

example, this assessment mentions the advanced successional stage and high ecological integrity of broadleaved species forest. For the “(broadleaved species)/Coprosma shrubland and rocky outcrops”, it mentions that although very modified by stock grazing and exotic pasture species, these shrublands nevertheless have indigenous dominance and are good examples of shrublands within rocky outcrop habitat, most of which have been lost. It also mentions the presence of desert broom and kōwhai in these areas. The rocky habitat also provides excellent habitat for lizards, and it is very likely that populations of lizards are present in these areas.

- [6] As noted on page 3 of the Wildlands response, these *“ecological realities formed the basis for our conclusions, including our formulation of permitted clearance limits that would ensure no significant adverse effects on these values”*.
- [7] In relation to our effects assessment approach, the “formulation” mentioned refers to the process that Mr Davis and I were tasked with during the Working Group - to determine a level of permitted clearance that would ensure no significant adverse ecological effects, so that some level of new fence construction could occur in the Hokonui Hills without the need for a resource consenting process. This aimed to provide the landowners with certainty around how much new fencing would be possible without incurring adverse ecological effects that would trigger the need for a consent.
- [8] Our starting point in this process was to consider the various ecological factors that gave significant value to the different areas (using the approach outlined above), and from there to determine what level of clearance could be sustained to ensure no more than minor adverse effects on each of these values. The values included all the aspects of the significance assessments – i.e. encompassing the criteria and subcriteria of representativeness, rarity, diversity and pattern, and ecological context. This included consideration of effects on those aspects listed in Policy BIO.2, which form a fundamental component of all assessments of ecological effects. It included key aspects such as effects on representativeness, populations of Threatened and At Risk

species, rocky outcrops, key habitat areas for fauna, buffering of Croydon Reserve, and connectivity across the landscape.

- [9] Anticipated new fencing requirements over the life of the proposed plan were also supplied by the landowners early on in this process. This was to ensure that the process was likely to be worthwhile; i.e., if anticipated effects of new fencing requirements were extremely high then a resource consent process would be required regardless, making the process of establishing permitted clearance limits pointless.
- [10] At Stoney Creek, the level of fencing anticipated by the landowner was considered likely to potentially result in more than minor ecological effects. The permitted clearance levels we agreed upon for Stoney Creek were lower than desired by Stoney Creek, but satisfied us regarding the levels of ecological effects.
- [11] At Wantwood Station, the level of fencing anticipated by the landowner was not considered likely to result in more than minor ecological effects. The permitted clearance limits here were therefore set to reflect expected fencing needs.
- [12] The reasons for Mr Davis and I concluding that the permitted clearance levels have no more than minor ecological effects were outlined in our respective evidence. For all values, we were satisfied that the key ecological values giving significance to the areas would be well maintained by the permitted clearance, with no more than minor effects. These reasons included: only very small areas of vegetation affected relative to total areas (thus having very little effect on representativeness and habitat values); buffering functions to Croydon Reserve are maintained; populations of Threatened and At Risk species will be maintained; continuing increases in the ecological integrity and indigenous condition and character of unaffected indigenous vegetation is likely over the life of the proposed plan (it is reasonable to assume that the expansion and maturation of seral vegetation will continue in the coming decades, although restricted to unpalatable species if grazed by stock).

- [13] As with all such assessments, the professional judgment and opinion of the ecologists involved plays a part in the process. In this instance, the independent opinions of Mr Davis and I closely aligned.

#### **Lizards and lizard habitat**

- [14] I agree that there has been no recent lizard survey of Wantwood Station, and that the species found in the 2001 survey mentioned by DOC could still be present in the Hokonui Hills. As noted by Ms Zammit-Ross, rocky areas with shrubs are key habitat areas where Southland green skink, cryptic skink and korero gecko could still be present. I also agree that the only way to be certain of the distribution and abundance of lizards is to conduct a detailed survey. It is possible populations of lizards could be present in parts of the Hokonui Hills containing rocky habitat and areas of indigenous or exotic vegetation such as rank grass and tussockland. Keeping rocky areas intact is therefore important.
- [15] As also discussed in the hearing, requiring a lizard survey prior to any vegetation clearance would impose a very large cost on the landowner. Furthermore, this requirement would also need to apply to any clearance of exotic vegetation including gorse, because lizards may also be present in exotic vegetation.
- [16] As previously noted in the hearing and in evidence, permitted vegetation clearance without prior lizard survey and management may result in incidental loss of individual lizards. But we remain of the opinion that this is extremely likely to represent a minor effect on lizard populations, because of the small permitted clearance limits, large extent of habitat available, and avoidance of high quality lizard habitat proposed.
- [17] It is true that killing lizards or disturbing them to an extent that risks significant harm without a Wildlife Act Authority is a criminal offence under the Wildlife Act 1953. If this was to be accounted for in the proposed plan, it would be necessary to undertake lizard survey and management prior to all land or vegetation disturbance in the Gore District. This would include all exotic and indigenous vegetation disturbance, including control of pest plants, maintenance of improved pasture, and maintenance of vegetation on the margins of tracks and

roads. This would impose enormous financial and practical constraints on most existing land management activities.

- [18] In paragraph 19 of her supplementary evidence, Ms Williams states that she does not support the proposed amendments to remove the provisions relating to avoiding Threatened or At-Risk species where it relates to the maintenance of improved pasture.
- [19] While it is always possible there could be At Risk tussock skink in improved pasture, the survey of herpetologist Mr Knox reported in Mr Davis's evidence did not observe any lizards, although it is acknowledged that the survey was brief. Further, the key habitats for lizards including tussock skink in the Hokonui Hills lie in habitats other than the improved pasture. On this basis, I remain of the opinion that the maintenance of improved pasture in the Hokonui Hills will not adversely affect populations of Threatened or At Risk lizards.

#### **Threatened, At Risk or significant indigenous plant species**

- [20] The distribution of desert broom (*Carmichaelia petriei*; At Risk-Declining) and kōwhai (*Sophora microphylla*; locally rare) within Wantwood Station were clearly described in the Wildlands response. These species occur in the "(broadleaved species)/Coprosma shrubland and rocky outcrops" (Vegetation Type 2), described on page 6 of the Wildlands response. The description of this shrubland notes that the shrubland "*is also notable for the presence of occasional kōwhai (Sophora microphylla) and desert broom (Carmichaelia petriei), the only locations on the property where these species were observed.*"
- [21] The two discrete areas of this shrubland habitat on Wantwood Station are clearly mapped on page 7 of the Wildlands response. The mapped areas include a wider area than that presently containing individuals of desert broom and kōwhai, and expansion of these two species into the remainder of the shrubland area is therefore possible.

### **Rocky outcrops and associated indigenous vegetation**

- [22] The areas of broadleaved species/coprosma shrubland associated with rocky outcrops at Wantwood Station are clearly mapped on page 7 of the Wildlands response, as noted above.
- [23] However, the mapping of Stoney Creek Station does not specifically map rocky areas. It is suggested that this mapping is revised so that rocky areas are clearly identified. This is discussed further below.

### **127ha Land Management Agreement area**

- [24] In Ms William's paragraph 20, she refers to my statement that no permitted vegetation clearance should be permitted in the 127ha area. To clarify, what I meant by this was no permitted clearance for *new activities*. I did not mean this to apply to clearance for existing activities such as fence maintenance.
- [25] Ms Williams is nevertheless correct that Mr Davis and I considered that permitted clearance for new activities in the 127ha area was inappropriate due to its high values relating to Threatened and At Risk flora and fauna species. For similar reasons, Mr Davis and I considered that this exclusion should also apply to rocky habitat (including the two areas of "(broadleaved species)/Coprosma shrubland and rocky outcrops" at Wantwood Station), because these areas are regionally rare habitat types and have higher values than other habitats for herpetofauna. It remains my opinion that permitted clearance within the 127ha area and within rocky habitat at Stoney Creek Station and Wantwood Station could result in significant adverse effects.
- [26] The current mapping of Stoney Creek Station does not specifically identify rocky areas. As mentioned above, it is recommended that this mapping is revised so that rocky areas are clearly identified and excluded from permitted clearance.
- [27] I agree with the recommendation at paragraph 22 of Ms Williams' supplementary statement, that the 127ha area and rocky habitats are mapped and exempted from the permitted clearance rules for new activities.

## Rules ECO-R2 j and k

- [28] An indicative draft map showing the areas proposed to be exempted from the permitted clearance rules ECO-R2 j and k for new activities (i.e. the 127ha area and rocky habitats) is provided in Appendix 1 below. The rocky areas mapped at Stoney Creek Station are all on ridge crests, and were mapped based on observations made during the site visit to Stoney Creek Station with members of the Working Group, supplemented with analysis of aerial imagery. Three areas of ridge crest with scattered rocks at Wantwood Station have also been included in this map, along with the two previously mapped areas of rocky outcrop at the Station ((broadleaved species)/*Coprosma* shrubland and rocky outcrops). Other smaller localised rocky habitats are also likely to be present, but the mapping captures the largest areas.
- [29] The currently proposed permitted clearance rules in ECO-R2 j and k stipulate that clearance must avoid Threatened and At Risk species.
- [30] Ms Zammit-Ross notes that it would be very difficult for a non-botanist to differentiate between non-threatened and At Risk or Threatened plant species, particularly for *Olearia* species. I agree with this, and it is likely that most landowners would find this difficult. I also consider that it is likely to be difficult for most landowners to identify habitat of Threatened and At Risk lizards. While key areas of lizard habitat have been excluded from permitted clearance, it is possible that localised pockets of favourable habitat for Threatened or at Risk species, such as rock piles and dense tussock, are present in other areas.
- [31] To ensure compliance with the proposed permitted vegetation clearance rules ECO-R2 j and k (which require avoidance of Threatened and At Risk species), it is therefore likely that landowners would need guidance on how to identify these aspects within proposed areas of proposed clearance. With photographs and descriptions of *Olearia* species a landowner would be able to recognise these plant species. Likewise, with descriptions of key features of lizard habitat (such as rock piles and shrubs around localised rocks), a landowner would be able to identify localised favourable lizard habitat. Providing guidance on these matters to landowners outside of the district plan would resolve the difficulties.

Alternatively, a landowner could commission a brief survey by specialists to assess plants and lizard habitats prior to undertaking clearance.

- [32] If the habitat assessment indicated suitable habitat was present for Threatened or At Risk lizard species, lizard habitat could be avoided where possible by re-routing the new activity. If the lizard habitat could not be avoided by re-routing, clearance would require a consent detailing more targeted lizard survey and management.

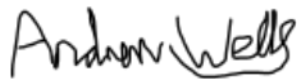
#### **Other comments**

- [33] It would be of value to update the FAQ section of the proposed plan to include additional material relating to the ecological values of the Hokonui Hills, drawn from relevant information presented as part of the hearing process.
- [34] Ms Warnock considers that Mr Davis and I have employed the wrong test in formulating the bespoke vegetation clearance rules for the Hokonui Hills. My perspective is that “protection” is best considered within a ‘macro’ ecological framework (i.e. of populations of species and habitats), rather than within a ‘micro’ ecological framework (i.e. of individuals of plants/animals). Impacts on individual plants/animals or very small areas of habitat relative to that available in an area are therefore not considered inconsistent with achieving overall ‘protection’ of the significant values at a site.

#### **Response to Stoney Creek Supplementary Evidence**

- [35] Ms Perkins raises concerns about the deletion of clause ECO-R2 (1)(h) relating to the removal of exotic species and pest plants and animals due to the potential need for residual clearance of indigenous vegetation (paragraphs 14 to 22).
- [36] My understanding is that there are some small patches of gorse in the SIVAs, but that they are not large or extensive and that this is why they were not mapped separately. This is based on the surveys conducted by e3scientific and discussions with Mr Davis during the Working Group meetings. I have not personally inspected these areas.

- [37] I consider that the effects on indigenous vegetation from spraying gorse within these patches, if they are dominated by gorse and relatively small in extent, would be minor. This issue was discussed with Mr Davis during the Working Group meetings, and we agreed on this.
- [38] If extensive and widespread areas of gorse within SIVA were encountered, the effects of residual clearance would depend on the proportion of indigenous plants present. It would be very difficult to gauge the effects without such information specific to the areas. But based on the mapping by e3scientific, this is not the case, which is why areas of gorse were not mapped.
- [39] If gorse is present in areas as scattered plants but not dominant, then careful selective spraying of individual gorse plants that minimised spray drift onto adjoining vegetation would, in my opinion, ensure the effects were no more than minor.



**Andrew Wells**

**03 April 2025**

Appendix 1. Draft map showing the areas proposed for exemption from the permitted clearance rules ECO-R2 j and k for new activities. Exempted areas are marked with blue lines. Areas include the 127ha Land Management Agreement area within Stoney Creek Station, the two areas of '(broadleaved species)/*Coprosma* shrubland and rocky outcrops' at Wantwood Station, and extensive areas of rocky habitats on ridge crests. The ridge crest areas are marked with a single line; these rocky habitats are generally restricted to a narrow band a few metres wide on either side of the ridge crests. Other smaller localised rocky habitats, not mapped in this figure, may also be present.

