

## Speaking Notes – Supplementary Evidence

Matiu Park, Boffa Miskell for TrustPower Limited ('TrustPower') and Meridian Energy Limited ('Meridian')

### Chapters 7 and 12 – Biodiversity Provisions, Proposed Horizons One Plan

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#### Introduction and Scope of Primary Evidence and Supplementary Evidence

1. Firstly, I will clarify that I prepared separate briefs of evidence for both TrustPower and Meridian. Supplementary evidence was filed jointly for TrustPower and Meridian. In summarising the primary evidence today, I refer to the original evidence filed for Meridian and to the supplementary evidence filed for both.
2. In section 1 of my primary evidence, I outline my background and experience. In particular, I am a qualified ecologist and a member of the New Zealand Ecological Society. I have experience in undertaking ecological assessments in a range of environments across New Zealand, as well as experience in the development of biodiversity provisions for statutory plans.
3. Section 1 of my evidence also outlines the nature of my role to provide ecological advice to TrustPower and Meridian on the biodiversity provisions of the proposed One Plan ('the Plan'), particularly Schedule E.
4. Section 2 of my original evidence outlines the principle concerns for TrustPower and Meridian as raised in submissions. Section 1 of my supplementary evidence expands on my original evidence and outlines the nature of the pre-hearing meetings and caucusing that I have attended. I also outline the revised provisions I have reviewed and provided comment on in my role as ecological adviser to TrustPower and Meridian.
5. Section 2 of my supplementary evidence outlines the scope of the changes to the biodiversity provisions (*Paragraph 2.2*). I note that as a result of the caucusing and pre-hearing meetings a number of the concerns raised in the submissions of TrustPower and Meridian have been resolved.

#### Schedule E and the One Plan Biodiversity Provisions

6. In section 3 of my primary evidence, I provide an overview of the biodiversity provisions of the Plan and how the information in Schedule E is derived from

predictive models and other information sources. I also discuss how Schedule E links into the corresponding policies and rules. I outline how this approach is different from other traditional approaches, particularly at the regional scale where alternative techniques are more costly.

7. I outline my general support for the Schedule E approach as a broad brush tool for assessing areas that are potentially ecologically significant. However, I also reaffirm that Schedule E casts the net very widely as to areas of potential ecological significance and recommend that amendments be made to address this shortcoming and inconsistency with section 6(c) of the Act.
8. In section 4 of my primary evidence, I discussed the objective of the Plan being to maintain biological diversity (*Paragraph 4.1*). I considered that the RMA section 6(c) requirements and the more general biodiversity requirements are inextricably linked in that protecting significant indigenous areas is a fundamental step towards maintaining indigenous biological diversity (*Paragraph 4.2*).

#### **Strengths and Weaknesses of the One Plan Approach**

9. Section 5 of my original evidence outlines the strengths and weaknesses of the traditional approach to biodiversity management under the RMA.
10. In section 6 of my primary evidence I outline the strengths and weaknesses of the Plan approach, in particular the weaknesses of the LENZ and LCDB(2) as predictive models. Most notably, that LENZ is only a model of reality to predict the distribution of land-based plants. The satellite imagery used to map vegetation through LCDB(2) also has a number of weaknesses in terms of combining similar vegetation communities and not identifying some vegetation types (*Paragraphs 6.2 – 6.4*). The most fundamental limitation of the Schedule E approach, however, is the broad brush approach to assessing significance in the absence of the full suite of ecological assessment criteria necessary to determine a site's significance (*Paragraph 6.5*). .
11. In section 7, I discuss the benefits of the Plan approach over traditional biodiversity provisions (*Paragraph 7.1*). I also discuss the recommended amendments to Schedule E as recommended by Ms. Maseyk and Ms Marr for Horizons to make Schedule E more useable and less subjective (*Paragraph 7.2*). Although I agree that the Schedule E approach has some benefits in terms of ease of use over traditional site-based assessments, I emphasised that it should only be used as a broad brush tool in the absence of field verification and consideration of the full suite of ecological assessment criteria (*Paragraph 7.4*).

12. My primary concern with the Schedule E approach outlined in both my primary and supplementary evidence was the inference that habitat type alone can be determinative of ecological significance (*Paragraph 7.5*). My original and supplementary evidence provide examples of habitat types that could be classified as significant under Schedule E, yet may not be significant when using the full suite of assessment criteria (*Paragraphs 9.4, Paragraph 3.3 & 3.4 & 4.23*).
13. I concluded that relying on the habitat type solely meeting the 'representativeness' or 'rarity/distinctiveness' criterion means that Schedule E can only ever be a broad brush approach (*Paragraph 7.6*). Given the potential risk that the habitat type identified by Schedule E may not be significant when assessed using the assessment criteria outlined in Table 7.7 (now proposed as Policy 12-7), it was my recommendation that this limitation be clearly stated in the Plan (*Paragraph 7.8*).
14. Despite these limitations, both my original and supplementary evidence supported the use of Schedule E as a tool for identifying *potential* areas of ecological significance under section 6(c) of the Act for rare and threatened habitats and for identifying *important* areas of indigenous biodiversity for at-risk habitats.

#### **Assessing Ecological Significance under the RMA**

15. In section 7 of my primary evidence I outlined my concern that Table 7.1 (now Policy 12-7) did not take into account the full suite of ecological assessment criteria typically used to assess significance (*Paragraphs 7.8 & 7.9*). Most notably Table 7.1 did not include criterion relating to size and shape (affecting the long-term viability of species, communities and ecosystems, and amount of diversity) or ecological sustainability. I considered that these terms are generally well understood by ecologists, planners and the Courts in terms of their application and meaning and should continue to be used in the Plan (*Paragraph 8.2*).
16. In section 8 of my primary evidence and section 4 of my supplementary evidence I expand on the importance of including these additional assessment criterion, particularly given the multiple changes in the location, and the nature of, the assessment criteria since they were originally included for as part of Table E.4. The criteria were subsequently included within the provisions of Chapter 7 as Table 7.1, then Policy 7-7 and the current revision includes these criteria in an amended form as Policy 12-7.
17. Given the recommended revisions of the criteria of Policy 12-7, in section 4 of my supplementary evidence I recommended the incorporation of representativeness and

ecological sustainability as ecological assessment criteria to ensure that the significance of sites was assessed appropriately under the RMA context.

### **The Criterion of Representativeness**

18. Section 4 of my supplementary evidence outlines my concern at the misrepresentation of the ecological assessment criterion 'representativeness' to mean 'under-represented' (*Paragraph 4.7*). While representativeness is considered one of the most important criteria for the assessment of significance in terms of section 6(c) of the RMA, the current Policy 12-7 criterion requires representativeness to be assessed using only spatial databases and predictive models. This step has already been undertaken via Schedule E (*Paragraph 4.19*).
19. I expand on this discussion by outlining how the Plan approach compares with traditional interpretations of the term 'representativeness', including providing examples of how the term is used as an assessment criterion by other regional councils (*Paragraphs 4.10 through 4.16*). I also discuss how Objective 7-1(c) and Policy 7-4(a) apply this term as it is traditionally understood, through the use of "best representative examples" of rare, threatened and at-risk habitats (*Paragraph 4.17 & 4.18*). I conclude with a recommendation that the 'representativeness' criterion be amended to include reference to 'species diversity, structure, composition and ecological processes typical of its habitat type' (*Paragraph 4.20*).
20. Section 4 of my supplementary evidence concludes with a recommendation to add a separate criterion for ecological sustainability to Policy 12-7 (*Paragraph 4.21*) consistent with section 8 of my primary evidence. The evidence of Mr Fuller for expands on the necessity of assessing ecological sustainability and condition of a site under the RMA.

### **The Role of the Assessment Criteria in Policy 12-7**

21. Section 4 of my supplementary evidence focused on the role of Policy 12-7 as an assessment tool. My concern is that Policy 12-7 does not provide for its intended dual role as criteria for determining the regional significance of a site and as criteria for assessing the effects of an activity (*Paragraph 4.4*).
22. I outline my concern that Policy 12-7 in its current recommended form, does not take matters any further than Schedule E (*Paragraph 4.9*).
23. I conclude that a site's significance under section 6(c) needs to be determined at the site specific level and that the assessment criteria outlined above need to be incorporated to enable Policy 12-7 to fulfil its intended role. In my opinion, Schedule

E should be a trigger to potential ecological significance and Policy 12-7 should be used to both determine a site's significance and then to assess the effects on the activity.

### **Addition of Habitat Types**

24. I supported in general the addition of a number of new habitat types to Schedule E. However, my supplementary evidence outlined concerns with the inclusion of some of these habitat types in the absence of the additional ecological assessment criteria sought in Policy 12-7. Section 3 of my supplementary evidence provided examples of these habitat types that may not actually be significant when assessed in the field (*Paragraphs 3.3 and 3.4*). A particular concern was the inclusion of bare substrate, given my experience that there will be many areas of bare substrate with little or no ecological or biodiversity values (*Paragraph 3.3*).

### **Activity Status for Rare, Threatened and At-Risk Habitat Types**

25. Sections 10 and 11 of my primary evidence discussed the activity status of activities in rare, threatened and at-risk habitat types. I outlined a number of concerns with this approach and the inherent risks to regional biodiversity with such a regulatory approach.

### **Biodiversity Offsets**

26. My primary and supplementary evidence discuss in some detail the benefits of recognising and providing for biodiversity offsets as a tool to avoid, remedy or mitigate adverse effects of activities on rare, threatened and at-risk habitat types. Section 12 of my primary evidence provided examples of how biodiversity gains can be achieved in a manner that outweighs the adverse effects of an activity.
27. My supplementary evidence supports the approach to providing for biodiversity offsets in the revised Policy 12-4(c) and Policy 12-6(c) and the recognition that there will be some instances where a net gain to the same habitat type cannot be achieved. In these cases, I support an approach that does not preclude the use of biodiversity offsets within 'the ecologically relevant locality' as the permanent protection of other habitat types will have some good biodiversity gains (*Paragraphs 5.2 and 5.3*).

### **Conclusion**

28. My primary evidence concluded with my support for the overall intent and approach of the biodiversity provisions of the Plan. My supplementary evidence supported a number of the changes in Schedule E and the provisions of Chapters 7 and 12 as

revised by the supplementary ecological and planning reports dated 5 November and 20 November.

29. However, as outlined in my supplementary evidence, I have some outstanding concerns with several of the recommended biodiversity provisions as revised by the Officers. Most importantly, I remain concerned at the use of Schedule E to determine ecological significance in the absence of field verification. Secondly, I consider that restricting the criteria for assessing ecological significance to those currently provided for in Policy 12-7 is inconsistent with traditional approaches to assessing ecological significance under the RMA.
  
30. This situation combined with the uncertain role of Policy 12-7 means that the habitat types identified as rare, threatened and at-risk under Schedule E are unlikely to change through the application of Policy 12-7. It is my opinion therefore that an alternative approach is required that more appropriately recognises regional significance. Schedule E should be used as a trigger to potential significance which can then be verified through field assessment and the use of established ecological assessment criteria.

Matiu Park  
Senior Ecologist, Boffa Miskell

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