
In the matter of: Clauses 6 and 8 of Schedule 1 – Resource
Management Act 1991 – Submissions on publicly
notified plan change and variation – Proposed Plan
Change 1 and Variation 1 to Waikato Regional Plan –
Waikato and Waipa River Catchments

And: **Wairakei Pastoral Ltd**

Submitter

And: **Waikato Regional Council**

Local Authority

REBUTTAL OF EVIDENCE OF DR MARTIN WILLIAM NEALE
Block 2 Hearing Topics

Dated: 10 May 2019

REBUTTAL OF EVIDENCE OF [YOUR NAME]

Block 2 Hearing Topics

SUMMARY

- 1 There is a clear consensus emerging from the technical evidence submitted for Block 2 that the riparian setbacks proposed in PC1 are too small to achieve meaningful freshwater outcomes. Furthermore, I agree with Ms McArthur that the buffer widths proposed in PC1 do not appear to be supported by clear empirical evidence.
- 2 Numerous studies that are referenced by the expert witnesses assess the benefits of riparian management, all of which indicate a setback of greater than that proposed in PC1 is necessary to provide positive environmental effects through sediment trapping, nutrient processing, increased shading, organic matter input and habitat quality improvements (i.e. spawning habitat for fish and roosting sites for invertebrates).
- 3 The minimum riparian setback recommended by the experts for natural waterbodies was 5 metres, with higher setbacks recommended based on the values of the waterbody. I support this approach.
- 4 I have concerns about (and rebut) the approach recommended by Mr McGiven as I consider that a setback of 1 metre width will provide little beneficial effects to waterbodies beyond the direct effects of stock exclusion.

REBUTTAL

Block 2 Hearing Topics

- 5 My name is Martin William Neale. I have the qualifications and experience recorded in my statement of evidence filed in relation to the Block 1 Hearing Topics.
- 6 My rebuttal evidence has been prepared in accordance with the Code of Conduct for expert witnesses as set out in Section 7 of the Environment Court of New Zealand Practice Note 2014.
- 7 Relevant to my expertise, I wish to comment on the evidence of the following expert witnesses:
 - 7.1 Dr Stewart for Department of Conservation.
 - 7.2 Ms McArthur for Department of Conservation.
 - 7.3 Dr Eivers for Fish & Game.
 - 7.4 Dr Daniel for Fish & Game.
 - 7.5 Mr McGiven for Federated Farmers.
- 8 My rebuttal evidence focuses on the issue of riparian management and setbacks.
- 9 As I stated in my evidence in chief, I have concerns that the setbacks proposed in PC1 are not sufficient to results in meaningful improvement in the health of the Waikato and Waipā Catchments.
- 10 This concern appears to be consistent with those of many of the other technical witness, including Dr Stewart, Ms McArthur, Dr Eivers and Dr Daniel.
- 11 Collectively, the experts have referred to over 20 peer-reviewed studies assessing the benefits of riparian management. Based on the effects of riparian management described in these studies, none of the experts have recommended a setback of less than 5 meters for natural waterbodies. Furthermore, for high areas (e.g. fish spawning areas) setbacks of up to 20 metres have been recommended.
- 12 I consider the commentary of the other experts on this topic is consistent with my evidence in chief and I support the recommendation of a minimum setback of 5 metres, with greater setbacks for high value areas.

- 13 In contrast, I have concerns that the narrow setbacks recommended by Mr McGiven would provide little meaningful benefit to freshwater bodies beyond the direct benefits of stock exclusion, as they would be too small to provide for sediment trapping, nutrient removal and healthy biological communities. I therefore rebut his evidence on this point.

Martin Neale

Puhoi Stour Limited

10 May 2019