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 EVIDENCE OF MARTIN WILLIAM NEALE

Block 1 Hearing Topics

Dated: 26 February 2019

REBUTTAL EVIDENCE OF MARTIN WILLIAM NEALE

Block 1 Hearing Topics

SUMMARY

- 1 The experts for a number of submitters have raised a number of concerns and issues regarding Table 3.11-1 in addition to the matters outlined in my evidence. These issues have led to experts suggesting:
 - 1.1 Changes to the numeric values in the table (Dr Canning, Dr Daniel, Dr Mueller, Dr Dupree, Ms McArthur, Dr Phillips, Dr le Miere, Dr Ausseil and Mr Hall),
 - 1.2 The inclusion of additional attributes or locations (Dr Canning, Ms McArthur, Mr Miller, Dr Mueller), and
 - 1.3 The addition of new time bound medium term objectives (Ms McArthur, Dr Phillips).
- 2 I therefore agree with Dr Mueller and Dr Ausseil that it would be sensible for these concerns and issues to be resolved by expert witness conferencing, and recommend that conferencing should include the following matters:
 - 2.1 Potential changes to the freshwater objectives arising from issues associated with discrepancies in current state assessments;
 - 2.2 Potential changes to the freshwater objectives arising from detection limit issues (e.g. ammonia; chorophyll a);
 - 2.3 Potential changes to the freshwater objectives arising from numerical inconsistencies (e.g. median greater than maximum; nitrogen species greater than total nitrogen);
 - 2.4 Potential changes to the freshwater objectives arising from outcomes sought (e.g. lower or higher objectives);
 - 2.5 The potential inclusion of additional attributes (e.g. dissolved oxygen; MCI) or locations;
 - 2.6 The potential addition of new time bound medium term objectives.
- 3 The expert witness conferencing should start as soon as possible and should be concluded by a fixed date so that a joint expert report can be presented before the conclusion of Block 2. The

report should include recommended changes to Table 3.11-1 and record areas of agreement by the experts, and any areas of disagreement (including the reasons for any disagreement).

REBUTTAL

- 1 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.
- 2 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.
- 3 Relevant to my expertise, I wish to respond to the evidence of the following expert witnesses:

Name	Submitter
Dr Adam Canning	Auckland / Waikato Fish and Game Council ID 74085
Dr Adam Daniel	Auckland / Waikato Fish and Game Council ID 74085
Dr Hannah Mueller	Beef + Lamb New Zealand Ltd ID 73369
Dr Craig Dupree	DairyNZ ID 74050
Ms Kathryn McArthur	Department of Conservation ID 71759
Dr Ngaire Phillips	Department of Conservation ID 71759
Dr Paul le Miere	Federated Farmers of New Zealand ID 74191
Mr Dean Miller	Mercury NZ Ltd ID 73182
Dr Olivier Ausseil	Waikato and Waipa River Iwi ID74035
Mr Garrett Hall	Watercare Services Ltd ID 74077

Freshwater Objectives

- 4 The importance of the freshwater objectives in PC1 is reflected in the volume of evidence that refers, and seeks changes, to Table 3.11-1.
- 5 For a wide range of reasons outlined in their evidence, experts have requested:
 - 5.1 Changes to the numeric values in the table (Dr Canning (para 4.2), Dr Daniel (para 4.5.6), Dr Mueller (para 25), Dr Dupree (para 6.8), Ms McArthur (para 86, 108 and 112), Dr Phillips (para 130), Dr le Miere (para 46), Dr Ausseil (para 47, 82 and 102 to 104), Mr Hall (para 2.8 and 5.13);
 - 5.2 The inclusion of additional attributes or locations (Dr Canning (para 3.33, 3.42, 3.49 and 3.52), Ms McArthur (para 87, 89, 96, 114, 115 to 134), Mr Miller (para 4.6, 4.7 and 4.18), Dr Mueller (para 38)); and
 - 5.3 The addition of new time bound medium term objectives (Ms McArthur (para 139) and Dr Phillips (para 134)).
- 6 In addition to the above changes, and the apparent errors and inconsistencies outlined in my EIC (see paras 44 to 92), Dr Ausseil (para 73), Ms McArthur (para 105) and Mr Hall (para 7.1 to 7.4) have identified further issues and errors relating to the freshwater objectives in their EIC.
- 7 Given the extent and implication of these issues, I support the recommendation of Dr Mueller (para 47) and Dr Ausseil (para 61) to address the development and content of Table 3.11-1 through expert conferencing.
- 8 Such conferencing should at least cover the following topics and their implications for Table 3.11-1:
 - 8.1 Potential changes to the freshwater objectives arising from issues associated with discrepancies in current state assessments;
 - 8.2 Potential changes to the freshwater objectives arising from detection limit issues (e.g. ammonia; chorophyll a);
 - 8.3 Potential changes to the freshwater objectives arising from numerical inconsistencies (e.g. median greater than maximum; nitrogen species greater than total nitrogen);

- 8.4 Potential changes to the freshwater objectives arising from outcomes sought (e.g. lower or higher objectives);
- 8.5 The potential inclusion of additional attributes (e.g. dissolved oxygen; MCI) or locations;
- 8.6 The potential addition of new time bound medium term objectives.

Dr Martin Neale

26 February 2019