
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 DWAYNE MCKAY

Block 1 Hearing Topics

Dated: 26 February 2019

REBUTTAL EVIDENCE OF DWAYNE MCKAY

Block 1 Hearing Topics

SUMMARY

- 1 As highlighted in Dr Neale's evidence for WPL there are clearly a number of issues with Table 3.11-1, further issues are raised by Ms Marr, Ms Kissick, and Mr Hall. I support Dr Neale's recommendation for expert witness conferencing by the science experts to resolve these matters and produce a revised version of Table 3.11-1.
- 2 Given the variety of terms/labels being used in evidence to identify the parameters listed in Table 3.11-1, I suggest that after expert conferencing has been completed on the Table (and there is some clarity around the numbers and their purposes), a further review (based on the NPS-FM definitions) should then occur around which terms best fit the intended 'use' of the Table.
- 3 In relation to Objective 1 and 3, I disagree with the inclusion of the wording "To reduce diffuse and point source discharges" as I consider this wording would be best placed within the policies/methods of PC1, as it describes one manner in which the plan seeks to achieve the Objectives. I note it will only be appropriate to require reductions in some circumstances, such as those operating above the 75th percentile (see para 21.2 below).
- 4 In relation to Objective 3, I disagree with Ms Kissick's (for DoC) recommendation to extend the timeframe from 2026 to 2030. Extending the compliance period with the short-term freshwater objectives does not appear to be consistent with the 2017 amendments to the NPS-FM.
- 5 I disagree with Mr Willis's (for Fonterra) conclusion that the NPS-FM "...gives little room for sub-catchments to be treated differentially in terms of the regulatory framework that applies and the management of cumulative effects needed to ensure bottom of catchment objectives are met".
- 6 Whilst I agree that the NPS-FM provisions require a "whole of catchment" approach (for the Waikato River catchment), as per para 52 my evidence the NPS-FM does not exclude the management of the parts, for example through FMU's and sub-catchments as a means of achieving this.

- 7 I disagree with the deletion of Objective 4 (as suggested by a number of witnesses):
- (a) Whilst Objective 2 provides for wellbeing as an outcome connected to improvements in water quality (long-term), Objective 4 provides for wellbeing during the process of maintaining or improving water quality, ensuring that wellbeing is continued to be provided for whilst communities are taking actions towards the 80-year Freshwater Objectives.
 - (b) I also disagree with the removal of 'adaptive management' from Objective 4, because the precautionary principle is a key aspect of the Vision and Strategy and adaptive management is a recognised way of implementing this principle.

REBUTTAL

- 8 My name is **Dwayne McKay**. I have the qualifications and experience recorded in my statement of evidence filed in relation to the Block 1 Hearing Topics.
- 9 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.
- 10 Relevant to my expertise, I wish to rebut the evidence of the following expert witnesses:

Name	Submitter
Ms Marr	Auckland / Waikato Fish and Game Council ID 74085
Mr Kessels	Beef + Lamb New Zealand Ltd ID 73369
Ms Young	DairyNZ ID 74050
Ms Kissick	Department of Conservation ID 71759
Mr Willis	Fonterra Co-operative Group Ltd ID 74057
Mr Matthews	Genesis Energy Ltd ID 74052
Ms Hardy	Miraka Ltd ID 73492
Ms Kydd-Smith	Waikato and Waipa River Iwi ID74035 #
Mr Hall	Watercare Services Ltd ID 74077
Mr Eccles	Federated Farmers of New Zealand (Waikato Region) ID 74191

Ms Marr for Auckland / Waikato Fish and Game Council ID 74085

Table 3.11-1

- 11 In her evidence Ms Marr makes a number of statements about Table 3.11-1. These statements include:

11.1 Para 19:

... the objectives of PC1 have an inappropriately narrow focus on just four contaminants – nitrogen, phosphorus, sediment and microbial pathogens. In order to give effect to the NPSFM, the WRPS and achieve the Vision and Strategy, ecosystem health in a more comprehensive sense must be addressed and this means more attributes must be managed.

11.2 Para 26:

Table 3.11-1 does not contain all the compulsory attributes required by the NPSFM.

11.3 Para 184:

... it is important to be clear on what the numerics in Table 3.11-1 actually are. Are they attributes (as part of a freshwater objective), a target, a limit or, something else?

11.4 Para 192:

PC1 as notified (and largely as recommended by s42A officers) stated that the numerics in Table 3.11-1 are limits and targets. I agree that that should remain the case.

- 12 As highlighted in Dr Neale's evidence and rebuttal on behalf of Wairakei Pastoral Ltd (**WPL**) there are clearly a number of issues with Table 3.11-1. I support Dr Neale's recommendation for expert witness conferencing by the science experts to resolve these matters and produce a revised version of Table 3.11-1.

Plan Provisions

- 13 Objectives 1, 2 and 3: I disagree with the inclusion of additional sub tables to Table 3.11-1 (1A-1C) and additional dates. Until such time that a thorough review of Table 3.11-1 is completed via expert witness conferencing, the effect of adding further attributes/details (including additional tables) cannot be understood. The material

included in these proposed sub tables and the additional dates should be included in the agenda for expert conferencing on Table 3.11-1.

- 14 I disagree with the removal of ‘adaptive management’ from Objective 4 (para 143), because the precautionary principle is a key aspect of the Vision and Strategy and adaptive management is a recognised way of implementing this principle.

Mr Kessels for Beef + Lamb New Zealand Ltd ID 73369

Table 3.11-1

- 15 I support the evidence presented by Mr Kessel’s as it provides clear guidance on why adaptive management and sub-catchment management are useful when seeking environmental outcomes (such as those in Table 3.11-1), and the elements required to ensure both frameworks are successful.
- 16 I will provide further commentary on this in subsequent hearing blocks, particularly in relation to the Farm Environment Plan provisions in Schedule 1 in Block 3.

Ms Young for DairyNZ ID 74050

Economics

- 17 In relation to economic modelling undertaken to inform the s 32 analysis, I do not agree with Ms Young’s statement “that the modelling undertaken was fit for purpose in that it informed an assessment of costs and benefits of PC1” for the reasons given by Mr Ford in his evidence on behalf of WPL.

Plan Provisions

- 18 Ms Young, in her Appendix 1, supports the recommendations given by the Officer in the Section 42A Report in relation to the wording of the plan provisions. In my statement of evidence, I have partially adopted the Officer’s proposed Objectives and I further clarify and simplify them by taking into account helpful material from the deleted titles and principal reasons for adopting them. I continue to prefer my suggested wording and a copy is included in **Appendix 1** to my rebuttal statement.

Ms Kissick for the Department of Conservation ID 71759

Table 3.11-1

- 19 Similar to Ms Marr, Ms Kissick makes a number of statements identifying an extensive number of issues with the content of Table 3.11-1.
- 20 As noted above, I support Dr Neale's recommendation for expert witness conferencing by the science experts to resolve these matters and produce a revised version of Table 3.11-1.

Plan Provisions

- 21 Appendix 4 of Ms Kissick's evidence contains an assessment of the 'Appropriateness of Objectives'. While I support the methodology used in the assessment and the criteria used to determine the appropriateness of the Objectives, I disagree with Ms Kissick's specific wording, as set out in Appendix 1 of her evidence.
- 21.1 Objective 1 (as notified): I disagree with the inclusion of the additional Tables 3.11.1a, 3.11-3 and 3.11-4 objective into Objective 1. Until such time that a thorough review of Table 3.11-1 is completed via expert witness conferencing, the effect of adding further attributes/details (including additional tables) cannot be understood.
- 21.2 Objective 2: I disagree with Ms Kissick's amendments to Objective 2, in particular the addition of the words "from the reduction of discharges". I note it will only be appropriate to require reductions in some circumstances, such as those operating above the 75th percentile.
- 21.3 Objective 3:
- (a) I disagree with the inclusion of the wording "To reduce diffuse and point source discharges" as I consider this wording would be best placed within the policies/methods of PC1, as it describes one manner in which the plan seeks to achieve this Objective. I note it will only be appropriate to require reductions in some circumstances, such as those operating above the 75th percentile. I also disagree with the inclusion of Tables 3.11.1a, 3.11-3 and 3.11-4, for the same reasons as identified in relation to Objective 1 above.
- (b) I also disagree with the extension of timeframe from 2026 to 2030 because extending the compliance period for the short-term freshwater objectives does

not appear to be consistent with the 2017 amendments to the NPS-FM.

21.4 Objective 4, I disagree with the deletion of Objective 4:

- (a) Whilst Objective 2 provides for wellbeing as an outcome connected to improvements in water quality (long-term), Objective 4 provides for wellbeing during the process of maintaining or improving water quality, ensuring that wellbeing is continued to be provided for whilst communities are taking actions.
- (b) I disagree with the removal of 'adaptive management' from Objective 4, because (as noted above) the precautionary principle is a key aspect of the Vision and Strategy and adaptive management is a recognised way of implementing this principle.

21.5 New Objectives 1 and 2: I do not disagree with the sentiments expressed within these two new proposed objectives, but the wording replicates in part the higher order documents (e.g. the RMA). In my opinion when writing objectives, it is not good practice to restate provisions from the RMA. It is not clear why these new objectives might be appropriate without first seeing the subsequent policies rules and methods intended to give effect to them. Currently I do not support the addition of these two new objectives.

21.6 New Objective 3: Ms Kissick's proposed objective reflects the Director-General's submission requesting additional recognition of wetlands. However, I do not understand why a new objective is required in addition to Objective 3 (as notified) if all appropriate attributes/details required are included in Table 3.11-1 or similar tables.

Mr Willis for Fonterra Co-operative Group Ltd ID 74057

Table 3.11-1

- 22 I disagree with Mr Willis's conclusion (para 6.62) that the NPS-FM "...gives little room for sub catchments to be treated differentially in terms of the regulatory framework that applies and the management of cumulative effects needed to ensure bottom of catchment objectives are met".
- 23 Whilst I agree that the NPS-FM provisions require a "whole of catchment" approach (for the Waikato River catchment), as per para 52 my evidence the NPS-FM does not exclude the management of the parts, for example through FMU's and sub-catchments as a means of achieving this.

- 24 I disagree with para 7.7 of Mr Willis's evidence where he states "The 80 year 'targets' are, in my opinion, best described as long term (80 year) desired water quality attribute states..." and I prefer para 28 Dr Neale's evidence on this point.
- 25 Given the variety of terms/labels being used in evidence to identify the attributes listed in Table 3.11-1, I suggest that once any expert conferencing has been completed on the Table (and there is some clarity around the attributes/details and their purposes), a further review (based on the NPS-FM definitions) should then occur around what terms best fit the intended 'use' of the table.

Plan Provisions

- 26 I support in principle the concept of a Nitrogen Risk Scorecard (para 6.12) as the idea holds merit as an additional tool to assist in the implementation of PC1. However, this concept will need to be explored in Block 2 when the detailed policies, methods and rules are scrutinised.
- 27 Mr Willis generally supports Objectives 1 and 3 as recommended in the Section 42A Report. I continue to prefer the amendments included in my statement of evidence in which I seek to clarify and further simplify the Officers' version.
- 28 I support (with minor amendments) the changes sought by Mr Willis to Objective 3. Mr Willis supports the Objective as proposed by the Officers in the Section 42A Report and has further deleted the words "is sufficient to". The further amendments included in my evidence seek to clarify and further simplify the Officers' version.
- 29 I support Mr Willis's inclusion of the wording "is undertaken in a way and at a rate that" into Objective 2, as I consider including this phrase further clarifies the outcome sought by the Objective.
- 30 I disagree with Mr Willis's recommendation (para 8.12) to delete Objective 4 based on the same reasoning as already given previously in this rebuttal.

Mr Matthews for Genesis Energy Ltd ID 74052

- 31 I support Mr Matthews' reasoning (para 35) for retaining Objective 4, namely:

I note that Objective 4 and Objective 2 share similarities in that they both provide for social and economic wellbeing while taking action to improve water quality as required by both the Vision and Strategy and the NPSFM. However Objective 2 is specific to recognising that restoration and protection of the Waikato and Waipā Rivers will result in

social, economic and cultural benefits for people, while Objective 4 is intended to recognise that the journey toward restoration and protection should not be at the expense of social, economic and cultural wellbeing.

32 I disagree with Mr Matthews' proposed wording for Objective 4 because:

32.1 Objective 4 is the only objective that gives clear signal that PC1 will not (by itself) achieve water quality desired by 2096, and that further plan change(s) is required.

32.2 I disagree with the removal of 'adaptive management' from Objective 4, for the reasons already given above.

Ms Hardy for Miraka Ltd ID 73492

Table 3.11-1

33 I support Ms Hardy's statements in:

33.1 Para 6.1 that:

Miraka supports the focus on sub-catchments and FMUs but proposes a reconfiguration of the Freshwater Management/Sub-catchment Unit boundaries based on three main criteria of:

- (a) Hydrologic connectivity;
- (b) Biophysical homogeneity; and
- (c) Socio cultural identification.

33.2 Para 6.11 that:

I agree that shifting the focus entirely to sub-catchments without an overall framework may result in the inferior outcomes anticipated by the Officers. However, I consider that the combined Freshwater Management/Sub-catchment Unit approach proposed by Miraka will ensure that the river system as a whole can still be considered. The combined Freshwater Management/Sub-catchment Units will be larger than the existing sub-catchments and will still allow for the river system as a whole to be managed.

34 Mr Williamson's evidence for WPL also further informs any decision around placement of catchment/sub-catchment boundaries. I

support any division of catchments that is undertaken in a consistent hydrological manner to Mr Williamson's evidence.

Plan Provisions

- 35 I disagree with the consequential amendments to Objectives 1 and 3 (para 6.18) that are proposed by Ms Hardy in relation to sub-catchments units/FMU's. I would generally support these matters being covered by revised PC1 policies.
- 36 In my opinion, Objectives 1 and 3 (as amended in my evidence) are suitable to support policies and methods that seek to alter sub-catchment/FMU boundaries.

Ms Kydd-Smith for Waikato and Waipa River Iwi ID74035

Table 3.11-1

- 37 In relation to the various terms/labels being given in evidence to parts of Table 3.11-1, I support the sentiment of Ms Kydd-Smith's comment in para 32 "I consider that the most appropriate language to use in this instance may more appropriately be a matter for legal submissions". As noted above, a review of the language used in the table, based on the NPS-FM definitions, will be appropriate after the numeric content has been revised through expert conferencing.

Plan Provisions

- 38 I support the outcome sought by Ms Kydd-Smith's inclusion of the words "By 2096, at the latest, or sooner where practicable, discharges of nitrogen ..." (para 28-30) into Objective 1. However, I do not consider that by including the wording in the Objective that there is any further motivation to reach the 2096 parameters quicker. I consider that amendments to policies, methods and rules are more likely to incentivise and facilitate progress.
- 39 Ms Kydd-Smith generally supports the recommendations given by the Officers in the Section 42A Report in relation to Objective 3. In my statement of evidence, I have partially adopted the Officer's proposed Objective but I seek to clarify and simplify it further by taking into account helpful material from the deleted titles and principal reasons for adopting them. I continue to prefer my suggested wording and a copy is included in **Appendix 1** to my rebuttal statement.
- 40 I support Ms Kydd-Smith's evidence as to why Objective 4 should be retained (para 44).
- 41 I also support Ms Kydd-Smith's amended version of Objective 4 with minor amendments of my own. However, I do not agree with

the removal of 'adaptive management' from Objective 4, for the reasons given above.

Mr Hall for Watercare Services Ltd ID 74077

Table 3.11-1

- 42 Mr Hall has also identified various issues with Table 3.11-1 and made statements qualifying them in his evidence. Some of these are in addition to those already identified by Dr Neale on behalf of WPL, and I support witness conferencing by the science experts to resolve these matters and revise the Table.

Ms Jordan for Beef and Lamb New Zealand Ltd

- 43 I support Ms Jordan's interpretation of the NPS-FM in relation to the parameters listed in Table 3.11-1 against Short Term and 80-year water quality columns. Ms Jordan's evidence is in accord with Dr Neale in that 'Freshwater Objectives' is the correct title as per the definition from the NPS-FM
- 44 I support the outcome sought via Objective 1 (now objective 1A and 1B) in Ms Jordan's evidence (para 114); however, I prefer the wording of Objective 1 in my own evidence.
- 45 I disagree with the deletion of Objective 3, as removing the objective removes the dates for achieving the Short-Term freshwater objectives. The evidence from Mr Williamson for WPL highlights the importance of early action to achieving this first step.
- 46 I support Ms Jordan's statements relating to the use of sub-catchment and adaptive management frameworks in PC1 e.g. para (123,126,138,140, 142)
- 47 I support the sentiment of Ms Jordan's Objectives 1A and 1B (para 114), but consider the outcome can still be best achieved through a single statement. I prefer Objective 1 as recommended in my evidence.
- 48 I support the inclusion of a new bullet point into the 'Background and Explanation' as per Ms Jordan's evidence in para 142 endorsing the use of sub-catchment approaches.
- 49 I also support the inclusion of load limits (paras 178 – 180). Dr Neale for WPL has included a supplementary table to Table 3.11-1 (Appendix 3 to his evidence) showing nutrient loads. Dr Neale's recommendation was included both in my evidence and Appendix 3 of my evidence.

**Mr Eccles Federated Farmers of New Zealand (FFNZ)
(Waikato Region) ID 74191**

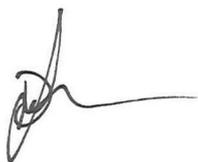
- 50 I support Mr Eccles in para 38 where he questions the rationale for prioritising the management of N over the other 3 contaminants referenced in PC1. Both Dr Jordan (para 36) and Dr Neale (para 17) on behalf of WPL in part agree with this however they further note that P is the key limiting factor of algal biomass in the Waikato River, and they propose that instead of controlling N there should be an increased emphasis on the FEP's instead of compliance with the NRP.
- 51 I support Mr Eccles's comments in a number of paragraphs where he expresses his concern that the s 32 reporting thus far undertaken for PC1 is inadequate (for example paras 2, 4a, 27 and 95). Mr Ford for WPL expressed similar concerns in his evidence.
- 52 Proposed amendments to the wording of the Objectives are referred to by Mr Eccles in his evidence. However these are not attached to his evidence and it seems they are to be found in the FFNZ submission.
- 53 For Objective 1 Mr Eccles proposes deleting the reference to Table 3.11-1. In Objective 3 he deletes the date, I do not support deleting the date at this point as the NPS-FM includes dates. I am also not supportive of deleting the reference to Table 3.11-1 from Objective 1 until expert conferencing determines if agreement can be reached on this Table.
- 54 I disagree with the proposed amendments to Objective 4 included in FFNZ's submission, in my opinion these amendments are more appropriate within an implementation method or policy than as an objective.

Conclusion

- 55 My above analysis concentrated on the key Objectives associated with WPL's submission. Where I haven't specifically commented on other witnesses wording or evidence, my position is that I prefer the wording as per **Appendix 1** of my rebuttal.
- 56 Whilst I will present my view of the Objectives as notified, I wish to reserve my position until such time that the subsequent policies, methods and rules are available to be heard and can be assessed together in Block 2.
- 57 From my reading of the planning witnesses' evidence, it appears that some of the experts witnesses may not have cross referenced their proposed amendments back to the original submission points.

To clarify that there is scope to amend PC1 as proposed I suggest all experts do so.

- 58 I have assumed all witnesses have included or attached in their evidence **all** the changes they have proposed to the plan provisions within PC1. I have addressed these proposed provision amendments accordingly.

A handwritten signature in black ink, appearing to be 'Dwayne McKay', with a long horizontal line extending to the right.

Dwayne McKay

Director Thornton Environmental

26 February 2018

Appendix 1 to Rebuttal Evidence of Dwayne McKay – Block 1 Hearing Topics

Plan Objectives

Objective 1

The 80-year freshwater objectives from Table 3.11-1 are met by maintaining or improving freshwater quality within the Waikato and Waipa River catchments and their sub-catchments by 2096.

Objective 2

Waikato and Waipa communities and their economy benefit from the maintenance or improvement of water quality in the Waikato and Waipa Rivers' ~~sub~~-catchments and their sub-catchments, ~~which~~ and is undertaken in a way and at a rate that enables the people and communities to continue to provide for their social, economic and cultural wellbeing.

Objective 3

The Short-Term freshwater objectives from Table 3.11-1 are met by maintaining or improving freshwater quality within the Waikato and Waipa River catchments and their sub-catchments by 2026.

Objective 4

A staged approach to change will be provided via policies, methods, and rules that enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing while:

- a. The Short Term and 80-year water quality objectives from Table 3.11-1 are met by maintaining or improving freshwater quality within the Waikato and Waipa River catchments and their sub-catchments; and
- b. Recognising that further contaminant reductions will be required within in some sub-catchments by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.

Objective 5

Tangata Whenua values are integrated into the co-management of the rivers and other water bodies within the catchment such that:

- a. tangata whenua have the ability to:

- i. manage their own lands and resources, by exercising mana whakahaere, for the benefit of their people; and
 - ii. actively sustain a relationship with ancestral land and with the rivers and other water bodies in the catchment; and
- b. new impediments to the flexibility of the use of both tangata whenua ancestral lands and land returned via Treaty settlements are minimised; and
- c. improvements in the rivers' water quality and the exercise of kaitiakitanga increase the spiritual and physical wellbeing of iwi and their tribal and cultural identity.

Objective 6

The Short Term and 80-year freshwater objectives from Table 3.11-1 are met within the water entering the Whangamarino Wetland by 2026 and 2096 respectively.