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

SUPPLEMENTARY EVIDENCE 2 OF DWAYNE CONNELL-MCKAY

Block 3 Hearing Topics

WRC Questions & Answers

Dated: 19 July 2019

SUPPLEMENTARY PLANNING EVIDENCE 2

BLOCK 3 HEARING TOPICS

WRC Questions & Answers

1. BACKGROUND

- 1 My name is **Dwayne Connell-McKay**. I have the qualifications and experience recorded in my statement of evidence filed in relation to the Block 1 Hearing Topics.
- 2 My supplementary 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.
- The Panel's minute (dated 7 June 2019) listed various questions from the Panel directed to the officers and witnesses appearing for Waikato Regional Council (WRC). This supplementary evidence provides my comments on the WRC responses to questions 5, 6, 7, 8, 9, 19, and 20. My comments are recorded in **Appendix 1** attached.

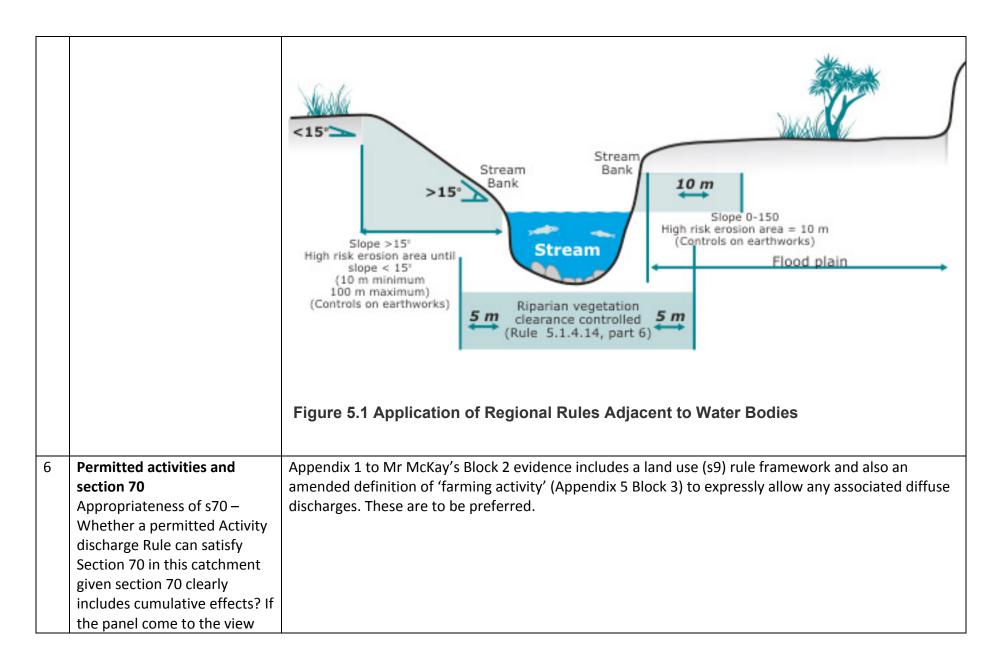
Dwayne Connell-McKay

Director – Thornton Environmental

19 July 2019

Appendix 1 to Mr D McKay's supplementary evidence, dated 19 July 2019, addressing some of the Panel's questions and Officers' responses

Q. #	Topic/Questions	Planning Comment from Mr Dwayne McKay in response to answers provided by Mr McCallum-Clark and other Officers
5	Slope. How can slope actually be established for the purposes of the rules? Is there a need, in order to provide guidance, to start providing information such as what distance the slope is measured? Is it an average slope? Is it a maximum slope? Is it a minimum slope? Regarding the definition of slope — WRC definition insufficient — does it need a 'start-point', plus a distance etc? Is a different test needed for different rules e.g. for erosion management than for stock exclusion?	The Regional Plan already contains guidance on slope in Chapter 5.1. Suggested amendments to the Officers proposed definition, to be consistent with the guidance and diagram in Chapter 5.1, are set out below. There should also be a cross reference (note) to the Chapter 5.1 provisions and the diagram. Slope: The steepness of the land surface. Slope is measured in degrees and to an accuracy no less than that achieved by a hand held inclinometer or Abney level. For the purposes of Chapter 3.11, for erosion prone land, cultivation and grazing, slope shall mean the average slope over any 20m distance (measured along the ground surface); and for stock exclusion requirements, shall mean the average slope, measured from the edge of the bed of a water body to a distance of 2010m minimum to a maximum of 100m perpendicular to that water body, averaged for the paddock. Note: These measures are to be consistent with the application of regional rules adjacent to water bodies in Chapter 5.1



	that they agree that cumulatively, agricultural discharges have an effect on aquatic ecosystems – should it be written into the rule 'thou shalt not have a cumulative adverse effect on aquatic life' as a precondition to the PA rule even though it is understood no one can satisfy it?	
7	Land use intensification. Is there an intermediate position where a forestry block is converted to a low intensity sheep and beef farm within 3.11.5.2 where there might be an increase but clearly at a smaller scale? Are the standard 'land use intensification non-complying activities' missing from Rule 3.11.5.2?	Appendix 1 to Mr McKay's Block 2 evidence includes a land use (s9) rule framework that provides for all land use change. This is to be preferred rather than hybrid rules.
8	Policies on groundwater quality. Is it an omission that there are no policies on groundwater and does	Potential submitters are unlikely to have anticipated that groundwater quality, and regulatory control of it, would be matters of concern to be addressed under this plan change. Accordingly, there has been very little evidence presented during the hearing relating to groundwater. The clear focus of PC1 has been on the water quality effects as measured in the surface waters of the rivers.

	something need to be done to fill that gap? Is scope to do so provided by submissions?	
9	Stocking rate. How should stocking rate be defined? The Panel would find it helpful if there was a definition of stocking rate or amendment in each rule to determine per hectare of what? Are different tests required for different purposes (eg erosion protection compared to stock exclusion)?	The 'stock unit' (SU) concept was first used to determine the economic performance of a farm. It was then adapted to express the carrying capacity of a farm (as reported for a financial year). As farming systems have become more complex the concept has become less usable. In relation to the questions posed by the Panel, as to the appropriate SUs in the case of, for example, erosion protection or stock exclusion, the environmental impacts of both these cases would have no connection to the SU values. That is, SUs are not relevant for environmental impacts. If SUs are to be used in PC1 as a proxy (first step) to reflect the intensity of a farming operation/land use, and therefore the activity class, then SUs per total hectare should be the metric. In saying that, apart from possibly being used as a basic first step proxy for intensity of land use, the concept of SUs has limited application under the RMA because there is no connection between SU values and environmental performance levels or environmental impacts. Appendix 1 to Mr McKay's Block 2 evidence includes a land use (s9) rule framework that does not require a definition of stocking rate. This is to be preferred.
19	Policy 10. Can Policy 10 be read as a Controlled Activity Rule policy? If that's not the intention, can clarification of the correct intention be provided?	Revised wording of Policy 10 is acceptable.

Numeric value of 75th percentile.

At what point would the information be able to be made available to derive the number for the 75th percentile? How do the dates for the 75th percentile, the NRP and the staging of the priority sub-catchments align?

All three timelines attached in Appendix E are considered unacceptable. Primarily this is because the use of the 75th percentile hinders timely actions to achieve Objective 3. This was addressed in Mr McKay's Block 2 evidence and the amended provisions (Appendix 1), including the use of Vulnerable land, are to be preferred.