IN THE MATTER of the Resource

Management Act 1991

(RMA)

AND

IN THE MATTER of the Proposed One

Plan – Water Hearing: water quality, farm strategy, water allocation,

groundwater, and beds of rivers and lakes.

TO BE HEARD BY Horizons Regional

Council

HEARING DATE 11 February 2010.

Supplementary Evidence of Christopher Adrian Hansen on Behalf of Ravensdown Fertiliser Co-operative Ltd

10 February 2010

Outline of Supplementary Evidence

- 1. My supplementary evidence has been prepared with regard to the Horizons Regional Council Supplementary Planning and Recommendations Report relating to Chapter 6 and 13, dated 11 November 2009, and other relevant supplementary Council evidence.
- 2. This evidence is also presented with regard to key pieces of evidence from submitters that have informed Council's supplementary evidence, including Fonterra's evidence, and Corina Jordan and Dr Neels Botha from Wellington Fish and Game Council.
- 3. The purpose of this supplementary evidence is to update my original evidence based on responses to my original evidence in Council's supplementary evidence, and updates to the track changes version of Chapter 6 and 13.
- 4. As an overall comment, I would like to note the difficulty for my evidence to meaningfully respond to Council's evidence when no direct recommendations are made in either the original or supplementary Planning and Recommendations Report on many of Ravensdown's submission points. Instead Council Officer's opinions have had to have been implied through the track changes version of the plan.

Entire Proposed Plan - FARM Strategy (Submission Statement #3)

Supplementary Officer Report

- 5. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table pg. 26), states that she disagrees with my original evidence, but that "meetings are still being held with the submitter and other interested parties to see if this issue can be resolved but it may remain an issue in contention."
- 6. The supplementary evidence of Greg Carlyon (para. 12, p.3) refers to submitters criticism of the lack of a comprehensive cost benefit analysis of FARM strategies and states that these analyses are flawed given the volatility of financial inputs, which then significantly alters the affordability of mitigation options proposed as part of the FARM strategy.
- 7. In addition, the legal submission of J Maassen (para. 26, p.12) states that "the FARM strategy has been the primary tool used by Horizons for the voluntary implementation of nutrient budgets and for farm testing purposes. It remains a

useful tool for farmers to understand the primary causes for nutrient leaching and how best farm management practices can minimise nitrogen leaching. Nevertheless, the requirement to complete a FARM strategy in Rule 13-1 as notified is not really a performance standard within the meaning of the RMA but would be usefully expressed as an information requirement".

8. In addition, I note that changes have been made to the layout of the FARM strategy workbook in response to Andrew Manderson's evidence, in an effort to simplify the document in response to submitters.

- 9. The Supplementary Planning and Recommendations Report gives no explanation or outcome of the response to Ravensdown's submission regarding FARM strategies, stating that meetings are still being held with the submitter. While a meeting was held, that Ravensdown attended, the FARM strategies approach was not covered. I am therefore left in the position of having no overall Council position to refer to, other than that implied through the track changes version of the Plan.
- 10. I note the change made to delete FARM strategies as a performance standard in Rule 13-1 (pg. 11 and 12 of the supplementary track change version of Chapter 13). Despite the FARM strategy being relegated to an information requirement, I question the appropriateness of requiring such a complex document to be provided, as information to support a controlled activity application, as it is open to discretion in a number of aspects. This creates uncertainty regarding the nature of the controlled activity, which must be granted, subject to conditions.
- 11. I note that Helen Marr and Clare Barton's response to the Chairperson's questions (p.11) indicates that one approach would be to not refer to the FARM strategy document at all but to have more detailed information requirements specified in the rule and that these could be specified as performance conditions. If this were the case, I consider it would be appropriate for the farming activities covered by Rule 13-1 to be a permitted activity subject to specific standards. This is because if the performance conditions could be specific and not open to discretion, the activity would be acceptable if they are met, logically pointing to the appropriateness of a permitted activity.

- 12. In addition, while Mr Carlyon may be correct in noting the volatility of financial input, I am concerned that this is taken to justify the argument that a robust cost benefit analysis can not be undertaken. In my view, this leaves considerable risk around the viability and economic efficiency of a regulatory regime when compared to other less onerous and costly measures of achieving the same outcome.
- 13. Overall, the supplementary evidence of Council has not addressed concerns raised in my original evidence and these comments still stand.

Entire Proposed Plan – Land Use Capability Data (Submission Statement #2)

Supplementary Officer Report

- 14. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table pg. 26), states that she disagrees with my original evidence, but that "meetings are still being held with the submitter and other interested parties to see if this issue can be resolved but it may remain an issue in contention."
- 15. Council's supplementary technical evidence does not appear to have revisited the overall philosophy of the LUC approach.

- 16. I note that while the purpose of the pre-hearing meeting with the fertiliser industry on 13 November 2009, was "to discuss and attempt to resolve the fertiliser industry's concerns about the drivers for establishing Water Management Zones, the application of Land Use Classification (LUC) values to farms in relation to regulation of activities, and controls on the application of fertiliser", this meeting focused on the wording of Rule 13.2, and did not cover the LUC approach. While the meeting notes stated that further discussion regarding the application of LUC would be useful, these discussions did not take place.
- 17. The fundamental philosophy of Council to use LUC classes to determine appropriate levels of nitrogen leaching has not changed as a result of my original evidence and that of Ant Roberts, of Ravensdown. I note that Ants Roberts has provided supplementary comments regarding LUC after reviewing Council's supplementary technical evidence.
- 18. Therefore the comments in my original evidence still stand.

Chapter 6 Paragraph 6.1.4 – Water Quality – Water Quality (Submission Statement #9)

Supplementary Officer Report

19. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table, pg. 26), states that she disagrees with my original evidence and that "the provisions of Section 6.1.4 outline in general terms that there are rivers across the Region where water quality is poor. The objectives and policies then provide further detail regarding water quality culminating in Table 13.1 which identifies the priority catchments i.e. those with the poorest water quality. I do not consider any further detail needs to be added to section 6.1.4."

Comment

- 20. It is noted that Table 13.1 sets out the sub-zones for the management of water quality. These are further specified in Schedule Ba. However, these tables and schedules, along with the objectives and policies of Chapter do not in my view provide a succinct or easily accessible overview of the resource management issue. Instead they set out methods for managing water quality based on the statement of the issue in 6.1.4. It is considered that the last paragraph of numbered bullets could be expanded to be more specific, and generally provide a higher level of detail. This would provide better link to the very specific tables and schedules.
- 21. Therefore, the concerns outlined in my original evidence still stand.

Policy 6.7 Land-use activities affecting surface water quality – Water Quality (Submission Statement #17, #18, #19 and #20)

Supplementary Officer Report

22. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table, pg. 26), states that she disagrees with my original evidence and that "The need for regulation associated with Rule 13-1 has been set out in the original evidence. I have also read the evidence of Corina Jordan and Mr Botha for Fish and Game New Zealand which further supports the need for regulation to manage the effects of the intensification of agricultural and horticultural land uses... I am not recommending... alterations to Policy 6-7."

- 23. I note that the supplementary evidence of Greg Carlyon (para. 4, pg. 1) states "There will no doubt be questions about whether Horizons has considered the alternatives presented by submitters. However, with the exception of proposals by Fonterra, no alternative approaches to that presented in the POP have come forward during the submission process."
- 24. I note minor changes have been made to Policy 6-7 through supplementary evidence. However these do not address Ravensdown's submission or my original evidence.

- 25. I query the statement by Ms. Barton (Table, pg. 26) that "The need for regulation associated with Rule 13-1 has been set out in the original evidence." The original Planning and Recommendations Report (Section 4.81.2, pg. 198) did not provide a recommendation regarding Rule 13-1 as it stated that "I would like the opportunity to work through the concerns of these submitters to more fully understand their issues". Therefore, although the Science Reports as referred to in Ms. Barton's evidence (Section 4.81.2, pg. 198) did contain scientific and technical evidence supporting the consenting of farming activities covered by Rule 13-1, the Planning and Recommendations Report did not provide a final recommendation on this.
- 26. In addition, my original evidence (para. 46, pg. 10) expressed concerns regarding Council's assessment that a regulatory approach is the most appropriate. Greg Carlyon's supplementary evidence (para. 4, pg. 1) appears to imply that it is up to submitters to come up with an alternative to the regulatory approach proposed, and if this is not achieved, that the status quo must therefore be correct. I question this logic, given the outstanding concerns expressed by Ravensdown, and other submitters, to the regulatory approach and the need for alternatives to be explored. I do not consider this has been given adequate attention through the supplementary evidence.
- 27. By restating the view that a regulatory approach is necessary, it does not appear that Ravensdown's evidence has been considered in supplementary evidence, and the points outlined in my original evidence still stand.
- 28. I comment further on the evidence of Fish and Game below in relation to Rule 13.1.

Policy 13.1 Consent decision making for discharges to water (Submission Statement #21)

Supplementary Officer Report

- 29. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table, pg. 27), states that she disagrees with my original evidence, but that "meetings are still being held with the submitter and other interested parties to see if this issue can be resolved but it may remain an issue in contention."
- 30. It is noted that the supplementary track changes version of Policy 13-1 has not been amended, other than several minor amendments, but that new policies 13.8 and 13.9 have been added which deal with circumstances when exceptions to the nitrogen leaching values will be made, and transfer of N-loss entitlement.

Comment

- 31. I am not aware of meetings being held to discuss Policy 13.1 in particular, and I was not part of these meetings if they were held.
- 32. Policy 13.8 and 13.9 give some exemptions to farming requiring discretionary consent and some ability to transfer nitrogen loss across farms. These policies are not opposed in principle, but their addition does not remove opposition to Policy 13.1 as Council's continued proposal for certain farming activities by consent still remains.
- 33. I do not consider Council's supplementary evidence has addressed the concerns outlined in my original evidence.

Rule 13.1 Dairy Farming, cropping, market gardening and intensive sheep and beef farming and associated activities (Submission Statement #23)

Supplementary Officer Report

34. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table, pg. 26), states that she disagrees with my original evidence and that "The need for regulation associated with Rule 13-1 has been set out in the original evidence. I have also read the evidence of Corina Jordan and Mr Botha for Fish and Game New Zealand which further supports the need for regulation to manage the effects of the intensification of agricultural and horticultural land uses. Changes are recommended to the wording of Rule 13.1 to make the rule more certain in its intent and interpretation. I am not recommending the removal of Rule 13.1."

- 35. I note that Rule 13.1, and the use of LUC, was a matter to be covered during prehearing meeting with the fertiliser industry held on 13 November 2009. Notes from this meeting state "A discussion was held about the industry's wish for farming to move from being a controlled to a permitted activity in Rule 13-1, and about the outcomes that HRC is seeking under the proposed rule. HRC agreed to consider a proposal developed by the industry where farming would be permitted alongside a commitment by industry to assist farmers to achieve targets set by HRC."
- 36. The fertiliser industry response to the pre-hearing meeting on 13 November was that the "Fertiliser Industry is not in a position to re-draft Proposed OnePlan Rule 13-1, but will support farmers by helping them to engage in, and document Best Management Practices for nutrient management following the principles provided in the Code of Practice for Nutrient Management. The fertiliser industry continues to support the management of diffuse nutrient loss by means of conditions for permitted activity".
- 37. I note that the Supplementary Planning and Recommendations Report (para. 24, pg. 5) in relation to Rule 13-1 has referred to Gerard Willis of Fonterra's evidence and stated "Fonterra Co-Operative has proposed a Permitted Activity rule for intensive farming activities. I recommend the approach be rejected. I will provide more extensive assessment after I have discussed the proposed Permitted Activity rule further with the submitter." I have not seen this extensive assessment. My understanding is that Fonterra proposes an approach where:
 - The dates at which Rule 13-1 applies is set back by 5 years. This provides
 existing farms with a greater transition period to comply with N-loss
 requirements.
 - Horizons undertake a review of the effectiveness of non-regulatory methods after 5 years and initiate a plan change if sufficient progress has been made.
 - Existing farms on Class I and II land that comply with N-loss values (and can prove this through a nutrient budget) are permitted.
 - Controlled activity status is retained for farms that cannot meet the N-loss values of Table 13.1 and for all new conversions.
 - Changes to Table 13.2 to allow grand parenting and to slow the rate of N-loss required.

- 38. I note there have been a number of changes recommended to Rule 13-1 as reflected in the Supplementary Track changes version of Chapter 13, including:
 - The conditions have been deleted, and one new performance condition added requiring that the activity must not result in nitrogen leaching exceeding the cumulative nitrogen leaching maximum
 - There are new information requirements (which were originally standards)
 which require that an applicant must provide a FARM strategy, have identified
 the LUC class of the land, and calculate the maximum leaching allowable per
 hectare per year
 - Minor changes have been made to the matters Council is reserving discretion over

Submitters evidence

- 39. The Supplementary Planning and Recommendations Report report (Table, pg. 26) refers to Corina Jordan and Mr Botha of Fish and Game's evidence. Corina Jordan's evidence states (para. 6.23): "A number of submitters have challenged the establishment of regulatory methods to control some farming practices in the proposed One Plan. The issues of voluntary vs regulatory methods to control farming activities and the concerns of landowners are addressed in Mr Botha's evidence. Mr Botha goes on to support the approach of the Proposed One Plan...The justification for a regulatory framework is based on the premise that without such a framework for freshwater values will not be maintained or the purposes of the Act met...."
- 40. Dr Botha's evidence (para. 7, pg. 3) states "From a theoretical point of view, voluntary approaches can work, but only if certain criteria are met. These criteria have to do with: a credible enforcement threat that regulators can fall back on if voluntarism fails; a monitoring programme, which is implemented by a respected and independent third party; and if there is peer sanction of underperformance... However, there is now a lot of evidence from Europe which suggests that voluntary agri-environmental measures may not be effective in inducing permanent behaviour change in farmers attitudes and behaviour.
- 41. There is no evidence from literature that a regulatory approach by itself is sufficient to effectively generate behaviour change... Governments often lack

adequate enforcement measures... Research has shown that there is a good case to be made for a 'mixed approach'...".

- 42. I query the statement in Ms. Barton's supplementary evidence (Table, pg. 26) that "The need for regulation associated with Rule 13-1 has been set out in the original evidence." The original Planning and Recommendations Report did not provide a recommendation regarding Rule 13-1 as it stated (Section 4.81.2 pg. 198) that "I would like the opportunity to work through the concerns of these submitters to more fully understand their issues". Therefore, although the Science Reports as referred to in Ms. Barton's evidence (Section 4.81.2 pg. 198) did provide scientific and technical evidence supporting the consent requirements for farming activities covered by Rule 13-1, the Planning and Recommendations Report did not provide a final recommendation on this.
- 43. I also understood that the Officer (as referred to in Section 4.81.2) was to further consider an economic evaluation by Ms Marr before preparing a Supplementary Report. However this does not appear to have been addressed in the Supplementary Planning and Recommendations Report.
- 44. It does not appear that Ravensdown's evidence has been considered in restating the view that a regulatory approach is necessary.
- 45. In relation to Fish and Game's evidence, I do not consider that Dr Botha's evidence wholly supports the use of Rule 13-1 requiring farming by consent. His evidence merely points out that an approach that is a mix of voluntary and regulatory approaches is the most appropriate from a theoretical point of view, and that Horizons is heading in the right direction towards this theoretical aim.
- 46. Ravensdown supports the greater flexibility proposed by Gerard Willis of Fonterra and supports the premise that farmers would find it very difficult and prohibitive to comply with the dates set out in Table 13.1, as there is no transition period to a much different and more onerous regime. However Fonterra's approach still requires farming by consent for new conversions and for farms that do not comply with the leaching values, which is an approach Ravensdown fundamentally opposes.
- 47. I note Greg Sneath of New Zealand Fertiliser Manufacturers Association has provided supplementary evidence on behalf of the fertiliser industry. This

evidence first outlines the continuing opposition of the fertiliser industry to the requirement for a consent the farming activities identified by Rule 13-1, and secondly, sets out an alternative approach to this approach, through a permitted activity rule. Ravensdown supports this evidence, and alternatives to consent being required for the farming activities identified by Rule 13-1.

48. Overall, the changes made through supplementary evidence have not addressed concerns in my original evidence.

Table 13.2 Land use capability nitrogen leaching/run off values – Water Quality (Submission Statement #24)

Supplementary Officer Report

- 49. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table pg. 26), states that she disagrees with my original evidence, but that "meetings are still being held with the submitter and other interested parties to see if this issue can be resolved but it may remain an issue in contention."
- 50. I am not aware that meetings were held to discuss Table 13.2.
- 51. I note that J Maassen's legal submission (para. 26, pg. 12) states "As a result of legal review several weeks ago, Mrs Barton and I have agreed on amendments to table 13.1 and table 13.2 so that they better relate to rule 13-1".
- 52. I note that the supplementary track changes version of Table 13.2 has not been amended other than for year 5, 10, and 20 "after rule comes into force" has been added.

Comment

53. It does not appear that pre-hearing meetings were held, or that the early circulation of evidence regarding concerns about Table 13.2 has resulted in any changes to the table. Therefore the concerns outlined in my original evidence still stand.

Rule 13.2 Fertiliser – Water Quality (Submission Statement #25 and #26)

Supplementary Officer Report

54. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table pg. 27), states that she disagrees with my original evidence, but that "meetings are still being held with the submitter and other interested parties to see if this issue can be resolved but it may remain an issue in contention."

- 55. I note that a pre-hearing meeting was held on 13 November 2009 with members of the fertiliser industry, including Ravensdown, to discuss concerns regarding Rule 13.2. Agreed outcomes of the meeting were circulated in late November 2009, with a fertiliser industry response on 11 December 2009. In summary, the following changes were agreed to Rule 13.2:
 - Condition (a): It was agreed that the total avoidance of discharge of fertiliser
 into waterways may be difficult when aerially applying fertilisers. It was
 discussed that similar wording to that used for the rules on application of
 agrichemicals may be suitable.
 - Condition (d): To be reworded to state that all reasonable measures are to be taken to avoid discharge fertilizer into waterbodies. If 60kg N/ha/yr or more is applied across the whole farm or where 200 kg N/ha/yr or more is applied to an individual block on a farm, a nutrient budget is required for that individual block.
 - Condition (d): Add definition of nutrient budget. This should include a
 reference to Overseer and a requirement for accreditation of nutrient
 management providers, (e.g. as per New Zealand Fertiliser Manufacturers
 Research Association requirements), with as a minimum, Intermediate
 Sustainable Nutrient Management and Advanced SNM qualifications, or
 prepared under the supervision of someone with that level of qualification.
 - The nutrient budget should be valid for a minimum of 3 years, unless there is a significant change in farm practice and available to HRC on request to the farmer
 - Condition (e) be deleted
- 56. Discussions were initiated but not completed regarding Rule 13-1 and the application of LUC.
- 57. I note that the supplementary track changes version of Chapter 13 has not been updated to reflect the outcomes of this pre-hearing meeting.

Comment

58. I understand that Council is considering its response to the outcomes of the prehearing meeting. However it is difficult to comment on Council's position as there has been no supplementary evidence prepared in response to the outcomes of the pre-hearing meeting, and provide updated recommendations.

- 59. In relation to discussion around condition (a), this appears to be partly addressing Ravensdown's submission point for Rule 13-2 to address aerial top dressing. However it is not clear what changes are proposed to be made to the plan as a result of the pre-hearing meeting.
- 60. In addition, Ravensdown's original submission point requesting that Rule 13-2 applies to all catchments does not appear to have been addressed at the prehearing meeting discussions.
- 61. I consider that while the pre-hearing meeting outcomes appear to have partly addressed some of the fertiliser industry's concerns, these changes have not been incorporated into the plan, and some aspects of Ravensdown's submission have not been addressed. Therefore my concerns regarding Rule 13-2 outlined in my original evidence remain.

Glossary – Term – Dairy Farming; Fertiliser; Intensive sheep and beef farming; Water management zone - Water Quality (Submission Statement #32, #35, #33, #34)

Supplementary Officer Report

62. Ms. Barton, in the Supplementary Planning and Recommendations Report (Table, pg. 27), states that she agrees with my original evidence, and that "the definition of Intensive Sheep and Beef Farming has been altered to remove the reference to the part of the farm being irrigated."

Comment

63. I note that the definition still refers to "where irrigation is used in the farming activity". My original evidence suggested that the definition could specify that it applies where the majority of the farm is irrigated. The amendment proposed by Council still leaves the area of the farm irrigated open to question. I consider this could be further clarified to state "where irrigation is used in the majority of the farming activity".