

IN THE MATTER

of the Resource
Management Act 1991
(RMA);

AND

IN THE MATTER

Environment
Canterbury (Temporary
Commissioners and
Improved Water
Management) Act 2010

AND

IN THE MATTER

of Proposed Variation
2 to the Canterbury
Land & Water
Regional Plan

TO BE HEARD BY

Environment
Canterbury

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

15 May 2015

Introduction

1. My name is Christopher Adrian Hansen and I am a Director and Senior Planning Consultant with Chris Hansen Consultants Ltd. My qualifications are a Bachelor of Regional Planning (Hons) from Massey University (1980). I am a full member of the New Zealand Planning Institute, a member of the Resource Management Law Assoc., and a certified Hearings Commissioner. I have over 33 years' experience in planning and resource management.
2. I have particular experience in the review and assessment of regional and district plans and the preparation of submissions, attendance at hearings providing expert planning evidence, and in mediation to resolve appeals.
3. I provide the following statement of evidence in support of the submission lodged by Ravensdown Fertiliser Co-operative Ltd (Ravensdown) to proposed Variation 2 to the proposed Canterbury Land & Water Regional Plan (PCLWRP). I assisted Ravensdown to review proposed Variation 2 and to prepare its submission.
4. I have read the Code of Conduct contained in the Environment Court's Practice Notes for Expert Witnesses and agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

Background

5. As outlined in its submission, Ravensdown owns and operates three fertiliser-manufacturing plants in Ravensbourne (Dunedin), Hornby (Christchurch) and Awatoto (Napier). Ravensdown also operates 46 bulk fertiliser stores throughout NZ, and has an interest in a further 70 consignment fertiliser stores which are operated by third parties in which Ravensdown products are stored.
6. In addition to these facilities, Ravensdown operates a number of quarries that mine and process agricultural lime in various parts of New Zealand. In the

Canterbury Region, Ravensdown has 2 lime works; 8 stores and 10 consignment stores.

7. In particular, in the area covered by Variation 2 Ravensdown has the Hinds Company Store and the Mayfield Consignment Store.
8. Ravensdown takes an interest in regional plans from the perspectives of how plan provisions affect its stores; fertiliser use; and the nutrient management approach adopted to meet water quality outcomes.
9. In the Hinds/Hekeao Plains Area, paragraph 3.31 of the s.42A Report records the following background of the water quality of the area:
“After considering the technical information and community feedback the Committee decided to divide the catchment into the upper catchment, dominated by foothills and the lower catchment dominated by flat alluvial plains. The dominant nutrient in the upper catchment is phosphorous [sic] and in the lower catchment it is nitrates. Water quality in the upper catchment is generally good and nutrients not over allocated. Water quality in the lower catchment is high in nitrates.”
10. In addition, I note that originally most of the Hinds/Hekeao Plains Area was classified a ‘red’ zone in the PCLWRP meaning the water quality outcomes were not being met. However, pages 24-26 of the s.32 Report for Variation 2 includes further catchment specific information that concludes that the Upper Hinds/Hekeao Plains Area meets water quality outcomes and the Lower Hinds/Hekeao Plains Area does not meet water quality outcomes (Page 25).
11. The s.32 Report also states that phosphorus (and sediment and faecal bacteria) loss rates will be closely linked to on-farm management practices (Section 3.5.2; Page 25).
12. This provides a useful context for considering the provisions of Variation 2 as it is has been concluded that the upper catchment is not over allocated in nutrients, while the lower catchment is.
13. In terms of the statutory and legal context by which Variation 2 to the PCLWRP, I note that Section 5 of the s.42A Report has a comprehensive assessment of the relevant provisions of the RMA include Part 2 matters; other planning instruments that are relevant including the National Policy Statement Freshwater Management (NPSFM), New Zealand Coastal Policy Statement (NZCPS), Canterbury Regional Policy Statement (RPS), and other

mechanisms. As Ravensdown's submission has not raised any issues regarding whether Variation 2 fulfils these planning mechanisms, I do not intend to cover the relevant provisions and am happy to adopt the s.42A Report summary.

Outline of Evidence

14. Ravensdown has provided a comprehensive submission to Variation 2. In my evidence I will address the specific Section 13 – Ashburton plan provisions of interest to Ravensdown, including any amendments recommended in the s.42A Report. I will also draw on the key points from Ravensdown's submission when discussing these provisions, and the recently issued decision on Variation 1 (Selwyn Te-Waihora) to the PCLWRP, where relevant.

Planning Evidence

Section 13.1 (Page 5 of Tracked Changes Version)

15. Paragraph 6 (page 6 of the Tracked Change version) reads:
“The Solutions Package requires a 45 percent reduction in nitrogen losses from farming activities in the Lower Hinds/Hekeao Plains Area by 2035. All farming activities are to operate at good management practice by 2017. Dairy and dairy support farms are then required to further reduce nitrogen loss rates by 45 and 25 percent respectively, by 2035. Change in land use or land use intensification is provided for on a maximum of 30,000ha provided the nitrogen loss is no more than 27 kilograms of nitrogen per hectare per annum.”
16. I note there are no amendments recommended in the s.42A Report to this paragraph. Ravensdown acknowledges the Solutions Package developed by the Zone Committee, and supports all farming activities operating at good management practices (GMP) by 2017 and allowing a change in land use or land use intensification on a maximum of 30,000ha.
17. Notwithstanding this support, Ravensdown does not support the setting of a 27kg N/ha/yr loss limit. This appears to be an arbitrary 'generic' limit that is not property specific and does not take into account the type of farming activity, the drainage characteristics of the soil, the climatic conditions and

topography of the property, the type of irrigation system used (if any), whether the practices set out in Schedule 24a have been fully adopted, the nitrogen baseline for the property and the level of any enduring reductions in nitrogen loss already achieved relative to that baseline. These are all factors that will be considered through the pending Matrix for Good Management (MGM) Project that will define nitrogen losses under GMP.

18. I consider it is premature to include the 27kg N/ha/yr loss limit provision in Variation 2 while the MGM Project has not been completed and there are no nitrogen loss rates to compare a farms performance with. In my opinion, it is better to wait for the results of the MGM Project in order to get the right nutrient loss limits included in the PCLWRP and for the land users to then know what nutrient management mitigations they need to put in place to achieve the required 45% reduction by 2035. I therefore agree with Ravensdown that the 27kg N/ha/yr loss limit should be deleted from Variation 2 and be incorporated into Section 13 – Ashburton by way of a plan change as provided for in Policy 4.11 of the PCLWRP.
19. The implications of this would be that PCLWRP provisions would apply until a plan change is introduced, and in my view these provisions provide adequate control of land uses in the interim, and are similar to the proposed nutrient management framework, in that a farm’s nitrogen losses cannot exceed their 2009-2013 nitrogen baseline. I note that (in general) the PCLWRP threshold is 20kg N which is the same as the Hinds/Hekeao Plains Area threshold for permitted activities in Rules 13.5.8 and 13.5.13.
20. As an aside, I note paragraph 7.13 of the s.42A Report identifies a number of submitters “...*identify concerns with the good management practice...*” and lists Ravensdown as one of these submitters. This statement does not in any way reflect the concern raised by Ravensdown regarding the timing of Variation 2 before MGM Project results are available, and appears to be a misrepresentation of the matters being raised by Ravensdown. For clarity, Ravensdown has not expressed any concerns with GMP in its submission, which it supports.

Baseline Land Use

21. I note Variation 2 includes the following definition of 'Baseline Land Use':
“means the land use, or uses, on a property between 1 July 2009 and 30 June 2013 used to determine the property's 'nitrogen baseline' as defined in section 2.9 of this Plan.”
22. As defined by the PCLWRP, the nitrogen baseline is the *“discharge of nitrogen below the root zone, as modelled by OVERSEER..., averaged over the period of 1 July 2009 - 30 June 2013, and expressed in kg per hectare per annum”*. I understand that to determine the nitrogen baseline the farm systems inputs from the land uses that were undertaken on the property over the baseline period are used, but I consider apart from that specific requirement, the land uses being undertaken during that period are historical only, and should not be used in the plan as a 'benchmark' to keep land uses from changing (I address this matter later in my evidence in relation to Policy 13.4.13 and provide reasons).
23. In my opinion, the definition of 'Baseline Land Use' is superfluous and unnecessary and can be deleted.

Good Management Practice Nitrogen Loss Rate

24. I note that the s.42A Report recommends the deletion of the term: 'Good Management Practice Nitrogen Loss Rate' (GMPNLR) from the policies and rules in Variation 2. I accept in principle that if the term is no longer used in the provisions, no definition is required.
25. However, there are two concerns I have with the recommended approach. Firstly, I am concerned with the alternative wording that has been used to replace this term does not have planning merit or add to the clarity and implementation of the plan. I discuss this point further below relating to Policy 13.4.13 (a).
26. Secondly, I find the reasons in the s.42A Report for deleting the definition and reference to GMPNLR from Variation 2 interesting. In particular, paragraph 9.114 states: *“In my opinion it is unhelpful, in advance of Policy 4.11 being*

implemented, to specifically define good management practice nitrogen and phosphorus loss rates or even good management practice. In my opinion, it is more appropriate to apply these terms at a conceptual level, rather than with specific definition. In part, this is arrived at in the knowledge of the considerable debate and analysis that has been undertaken by the industry sector towards the framework for good management practice to be developed under Policy 4.11, and the uncertainty that that process has worked under.” (emphasis added)

27. The reason why I find this paragraph interesting is that this sums up the very essence of Ravensdown’s submission regarding Variation 2 being premature and the difficulties in developing plan provisions when GMPNLR and GMP are not known. From a planning perspective, I have a real difficulty accepting that applying these terms (and in fact principles) at a conceptual level represents good planning practice. While I accept that there is planning merit in proceeding with a regulatory approach in the absence of good information where a resource is at imminent risk or under immediate threat, I do not accept that a regulatory approach should be adopted using a ‘conceptual’ framework when the key elements (in this case GMPNLR and GMP) are not currently known, but will be within the immediate future.
28. Part of the s.32 evaluation is the risk of not acting (s.32 (2) (c)). In this case, as I have discussed above, the risk of not acting would be minimised by implementation of the current PCLWRP provisions and the opportunity for Council to introduce a plan change in the very near future once the results of the MGM Project are known (in accordance with Policy 4.11). In addition, as outlined in my paragraphs 9 - 11 above, the risk is only associated with the Lower Hinds/Hekeao Plains as the Upper Hinds/Hekeao Plains are not at risk.
29. In its submission, Ravensdown sought the definition of GMPNLR be amended to read: *“means nitrogen loss rates (in kilograms per hectare per annum) from a property ~~to water~~ as modelled with OVERSEERTM, or equivalent model approved by the Chief Executive of Environment Canterbury for different soils, rainfall and farm type operating at good management practice.”* I agree that the definition should be kept in Variation 2 and modified as sought by Ravensdown in its submission.

Farming Activity

30. In its submission Ravensdown sought for the term *'farming activity'* to be defined. The basic planning principle is that defining a commonly used term in a plan allows certainty and clarity, and does not lead to questions of whether an activity is or is not covered by a plan provision. This is critical for a resource user to determine how the plan provisions provide (or do not provide) for their activity. The alternative is to rely on a common definition (i.e. one that may be derived from using a dictionary).
31. That is the case for Variation 2 and the term *'farming activity'*. There is no exact match found for the term *'farming activity'* in the Oxford Dictionary. The common understanding of the term *'farming'* means: *"The activity or business of growing crops and raising livestock"*; and the common understanding of the term *'activity'* means: *"The condition in which things happen or being done"*.
32. While looking at the common understanding of *'farming activity'* seems straight forward, it gets more complicated when reading closely the policies and rules in Variation 2 where provisions apply to the use of land for *'farming activity'*, the use of land for a *'farming activity as part of a farming enterprise'*, or a *"farming enterprise"* (which is defined). This is further complicated with the s.42A Report recommendations where Policy 13.4.10 (if amended) would reference cattle, pigs and deer, and Policy 13.4.13 (if amended) would reference dairy and dairy support (which covers a range of agricultural activities).
33. I also note there seems to be an assumption that a farm will only be one activity, whereas in reality a farm may have a mix of pastoral, arable, dairy etc. The overall result is that it is confusing and unclear what *'farming activity'* might refer to, and I consider a definition of *'farming activity'* has planning merit and would assist with these concerns. I also note 3 other submitters (Bowden Environmental, the Fertiliser Association of NZ, and Ballance Agri-nutrients) seek a definition of *'dairy support'* in order to have guidance regarding what that term means.
34. A suggested definitions would be:

“farming activity means the use of land for the production of primary products including agricultural, pastoral, horticultural and forestry products.”

Policy 13.4.9 (c) (Page 8 of Tracked Changes Version)

35. I note the s.42A Report recommends Policy 13.4.9 (c) be amended by replacing the term ‘*restricting*’ with the term ‘*prevent*’, and includes in the footnote 8 a reference to Ravensdown’s submission for allowing this amendment.
36. Ravensdown’s submission supported the intent of the policy to improve the overall water quality in the Hinds/Hekeao Plains Area, but raised a concern that the intent in (c) is to restrict activities rather than control effects. Ravensdown considered it is more appropriate and more consistent with s.30 of the RMA if the policy intended to control increases in nitrogen losses and sought for Policy 13.4.9 (c) to be amended by replacing the term ‘*restricting*’ with the term ‘*controlling*’ to be consistent with s.30 of the RMA. I agree with this request. In my opinion, the term ‘*control*’ provides the Council with the opportunity to provide for or restrict as appropriate, and is consistent with the current state of the water quality in the Upper Hinds/Hekeao Plains Area (as discussed in paragraph 9 - 11 of my evidence above) and rule regime (which allows some discretion) included in Variation 2.
37. I do not support the term ‘*prevent*’ which in my opinion is more limiting than the term ‘*restrict*’ and does not achieve the intent of the Zone Committee Solutions Package, or Policy 13.4.9 (b) which is directed towards improving the management of nitrogen losses. I disagree with the s.42A Report that suggests that this amendment is in response to Ravensdown’s submission. In my opinion, this amendment is not within the scope of the Ravensdown submission, and is not justified.
38. I consider the original request by Ravensdown to have the term ‘*restricting*’ replaced with the term ‘*controlling*’ is necessary to implement the intent of the Zone Committee Solutions Package and the intent of Policy 13.4.9.

Policy 13.4.10 (Page 9 of the Tracked Changes Version)

39. I note there are several amendments recommended in the s.42A Report to Policy 13.4.10. In its submission Ravensdown supported the direction and intent of Policy 13.4.10 in regards to the management of phosphorus. I note this intention remains, and I support the policy (with amendments recommended) accordingly.

Policy 13.4.11 (Page 9 of the Tracked Changes Version)

40. I note the s.42A Report recommends one amendment to Policy 13.4.11 which is to replace the term *'maintain'* with the term *'reduce'*. In its submission, Ravensdown supported the overall intent of the policy to maintain water quality in the Upper Hinds/Hekeao Plains Area, subject to a number of amendments that included: the policy should be consistent with other Variation 2 provisions and reference nitrogen losses (rather than discharges); nitrogen losses should be *'controlled'* rather than *'capped'*; and phosphorus loss should be controlled through GMP, which may be required to maintain at the current loss levels.
41. As I have referenced in paragraph 9 – 11 of my evidence, the water quality in the Upper Hinds/Hekeao Plains Area is generally good and nutrients not over allocated, with the dominant nutrient being phosphorus. In my view, Policy 13.4.9 could be considered the *'over-arching'* policy for the entire Hinds/Hekeao Plains Area, and while there is a focus on improving water quality, the requirement is to improve the management of phosphorus and not a reduction. In my opinion, Policy 13.4.11 is correctly written using the term *'maintain'* (which also remains at the beginning of the policy) to reflect the intention of Policy 13.4.9 which reflects the Zone Committee solution package, and responds to the state of the water quality of the Upper Hinds/Hekeao Plains Area. In other words, there is no justification, or in fact need, to reduce current phosphorus losses as the current water quality will be maintained through the adoption of GMP. Furthermore, the policy, which begins with the term *'maintain'*, does not make sense if the term *'maintain'* is replaced with *'reduce'* when referring to current phosphorus losses.

42. In relation to the matters raised by Ravensdown in its submission, in my opinion these amendments ‘refine’ the policy by making it consistent with other terminology used in the rules (i.e. referring to nitrogen losses rather than discharges). As I have discussed above, in my opinion the term ‘*control*’ is appropriate and reflects the fact that maintenance can be achieved by allowing for and/or reducing phosphorus as reflected in the rule regime included in Variation 2.

43. I therefore consider the amendments sought by Ravensdown have planning merit, and would seek Policy 13.4.11 to be amended to read:

“13.4.11 Maintain water quality in the Upper Hinds/Hekeao Plains Area by ~~eapping~~ controlling discharges of nitrogen losses at 114 tonnes of nitrogen per year and requiring all farming activities to operate at good management practice to ~~maintain current~~ control phosphorus losses.”

Policy 13.4.12 (Page 9 of the Tracked Changes Version)

44. I note there are no amendments recommended to Policy 13.4.12 in the s.42A Report. While Ravensdown raised a number of submission points on this policy (a number of which raised clarification matters), I consider there is merit in changing the policy to refer to reducing nitrogen *losses* rather than discharges, for reasons given above.

45. I would seek Policy 13.4.12 to be amended to read:

“13.4.12 Improve water quality in the Lower Hinds/Hekeao Plains Area by reducing the ~~discharge of~~ nitrogen losses from farming activities to achieve a target load of 3,400 tonnes of nitrogen per year by 2035.”

Policy 13.4.13 (Page 9 of the Tracked Changes Version)

46. Policy 13.4.13 is a critical policy that is primarily designed to address water quality issues in the Lower Hinds/Hekeao Plains Area. I note the s.42A Report recommends a number of amendments to the policy, of which are relevant to Ravensdown’s the submission points on this policy. Instead of addressing the s.42A Report amendments first, and the Ravensdown’s submission points (as I have done above), it may be simpler to go through the policy from the start and address both matters accordingly.

47. In relation to Policy 13.4.13 (a), I note there are a number of amendments recommended to read (red shows recommended amendments):
- “(a) requiring, from 1 January 2017, all existing farming activities to discharge no more nitrogen than [sic] the loss rate that could reasonably be expected from the implementation of ~~meet~~ good management practices, ~~nitrogen loss rates~~¹⁷ from 1 January 2017, calculated on the baseline land uses:”*. From a readability point of view, I do not consider the policy reads well as the 1 January 2017 date is repeated, and should be deleted, and (I suspect) the word ‘then’ in the second line should read ‘than’.
48. From a planning perspective, there are a number of issues that I wish to address. Firstly, in relation to the recommended amendments, I note the term ‘... no more nitrogen than [sic] could reasonably be expected from implementation of...’ has been introduced to replace the reference to GMPNLR, and I note this phrase has also been introduced into Table 13 (i) and Part B, Clause 5(a) of Schedule 7. In my opinion, this phrase is vague and not measurable. What criteria does Council intend to use to determine whether the nitrogen loss rates could be reasonably expected, especially when the GMP numbers are not yet known? In my opinion, adopting these types of phrases is a further example of why the introduction of Variation 2 is premature and the need to find alternative methods/terms until GMPNLR are determined.
49. I also note that Policy 13.4.13 (a) requires the nitrogen loss rate to be calculated on the ‘baseline land uses’. As I discussed in paragraphs 21 - 23 above, the baseline land uses were used to calculate the nitrogen baseline for a property for the period of 1 July 2009 to 30 June 2013. In my opinion, it is not appropriate for the baseline land uses to be then used after 2017 for the calculation of nitrogen loss. This would not recognise that there might be changes in the land uses and the management of nutrients in response to GMP.
50. In my opinion, reference to the baseline land uses should be deleted from Policy 13.4.13 as they are not relevant or appropriate. Requiring the farming activity to achieve GMP, with the subsequent % reductions in future years, is sufficient. The requirement to meet these % reductions is also backed up by the nitrogen baseline concept which is still present in Variation 2. While I have concerns with the use of the nitrogen baseline as a ‘backstop’ to

determine the activity status of farming activities for reasons discussed below, if it is retained in Variation 2, it gives a nitrogen loss figure that the rules say cannot be exceeded.

51. I note in Policy 13.4.13 (b) that the s.42A Report recommends the introduction of the % reduction in nitrogen loss rates that had been in Table 13(h) of the notified Variation 2. These reductions only apply to dairy and dairy support and not all farming activities, and (apparently) only existing activities as the reductions are to be made on the nitrogen loss rates established in (a) which only relates to existing activities. I find this confusing as it appears that achieving the target load of 3,400 tonnes of nitrogen per annum by 2035 is the responsibility of existing activities only, with the % reductions in Policy 13.4.13 (b) only applying to existing dairy/dairy support activities – is this what was intended? In my opinion, the word ‘existing’ should be deleted from (a) to ensure all activities are captured by the policy intent.
52. In relation to Policy 13.4.13 (c), I note the s.42A Report recommends it be amended to read (red shows recommended amendments): “enabling, by way of resource consent process, land use intensification or changes in land use increases in nitrogen losses, beyond that for the baseline land use²⁰ on a maximum of 30,000 hectares of land, provided the nitrogen loss calculation is limited to no more than 27 kg per hectare per year.” I note that footnote 20 identifies Ravensdown’s submission as the source of the recommended amendments with the note: “(noted that recommendation is only similar to the decision sought by Ravensdown). I am at a loss to work out how the s.42A Report determines that the amendments it recommends are in response to Ravensdown’s submission, which I discuss below. In fact, Ravensdown sought deletion of the term ‘Baseline Land Uses’ from Policy 13.4.13 (a) so I cannot see how that submission could then be used to include that term in Policy 13.4.13 (c).
53. As already discussed, Ravensdown supports the increase in nitrogen losses beyond the nitrogen baseline as provided for in Rule 13.5.14 and Rules 13.5.21 and 13.5.22. I note the amended policy refers to “... increases in nitrogen losses beyond that for the **baseline land use**,...” (emphasis added). As I have discussed above, the baseline land use had a specific purpose for determining the nitrogen baseline, and it is not appropriate to carry this

definition into the policies and rules. In my opinion, the policy should read: “... *increase in nitrogen losses beyond that for the ~~baseline land use nitrogen baseline~~...*”. As discussed above, I have concerns about the 27 kg/N/ha/yr nitrogen loss limit, and in my view this should be deleted from Policy 13.4.13 (c) and replaced with the GMP numbers once the MGM Project is available through a plan change (as sought by Ravensdown in its submission).

54. In its submission Ravensdown expressed a wider concern that there seems to be a ‘disconnect’ between the Nitrogen Baseline; Policy 13.4.13 and Rules 13.5.9 – 13.5.12 and Rules 13.5.15 – 13.5.20. In particular Ravensdown understood that the purpose of the *Nitrogen Baseline* was to provide a benchmark for farms to be measured against, but the focus was on MGM numbers to be introduced for the different sectors, and the GMP be implemented to achieve the MGM numbers.
55. However, Ravensdown noted that Condition 2 of Rule 13.5.17 (which remains unchanged in the Tracked Change Version) states that the use of land for a farming activity is a restricted discretionary activity if the nitrogen loss calculation does not exceed the *Nitrogen Baseline*, and the matters of discretion for this rule include the GMP nitrogen loss rates that are required from 1 January 2017 (which are subject to recommended amendments through the s.42A Report).
56. The key point here is that the policies imply that the *Nitrogen Baseline* is not important (in fact the policies in the notified version or the amendments recommended in the S42A report do not even reference the *Nitrogen Baseline* apart from the new Policy 13.4.13A which relates specifically to the establishment or disestablishment of farming enterprises) from 1 January 2017 as the GMP loss rates will take precedence from this date, but then the rules dictate that the use of land for farming activities, even after the GMP nitrogen loss rates are introduced, will have to comply with their *Nitrogen Baseline* irrespective of what GMP dictates.
57. From this perspective, Ravensdown considered the *Nitrogen Baseline* is being used as a ‘backstop’ to determine the activity status of farming activities in the rules, as any exceedence of the *Nitrogen Baseline* is a prohibited activity. I agree that this seems contrary to the intention of the Policy 13.4.13 that promotes the use of GMP without any indication at all that the *Nitrogen*

Baseline cannot be exceeded. As discussed above, even the s.42A Report recommended amendments to Policy 13.4.13 (c) uses the term *Baseline Land Use* and not *Nitrogen Baseline*.

58. From the above discussion I would recommend the following amendments be made to Policy 13.4.13:

- In relation to (a), delete the word '*existing*' and the term '*baseline land uses*'; reject the s.42A Report recommendations and retain (a) as notified (with above deletions);
- In relation to (b), if the word '*existing*' is not deleted from (a), clarify whether the % reductions apply to all activities;
- In relation to (c), reject the s.42A Report and retain (c) as notified, apart from deleting the phrase "*...provided the nitrogen loss calculation is limited to no more than 27 kg per hectare per year.*"

New Policy 13.4.13A (Page 10 of the Tracked Changes Version)

59. I note the s.42A Report recommends a new Policy 13.4.13A that enables the establishment and disestablishment of farming enterprises. In principle I support the proposed new policy as it is enabling, subject to the matters of concern raised with Policy 13.4.13 above being addressed.

Rule 13.5.9 and Rule 13.5.10 (Page 13 of the Tracked Changes Version)

60. I note the s.42A Report recommends no change to Rule 13.5.9, and recommends amendments to Rule 13.5.10 to clarify that the nitrogen baseline for the activity as part of a farming enterprise is aggregated, and to clarify what part of a farming enterprise the rule applies.

61. In its submission Ravensdown questioned why farming enterprises required a discretionary activity consent and sought Rule 13.5.10 to be deleted and for Rule 13.5.9 to be amended to provide for farming activity as part of a farming enterprise.

62. With the introduction of Policy 13.4.13A that enables and establishment and disestablish of a farming enterprise (which I support above), I consider it is appropriate for farming activity as part of a farming enterprise to be provided for separately in the rules. I can therefore confirm Ravensdown is no longer

seeking the relief it sought in its submission, and supports the recommended amendments to Rule 13.5.10.

63. Notwithstanding this, and in the context of the Policies 13.4.9 and 13.4.11 (and subject to the matters related to these policies discussed above), I consider it is appropriate that Rule 13.5.10 provide for a farming activity as part of a farming enterprise as a restricted discretionary activity in the Upper Hinds/Hekeao Plains Area. I note from the s.42A Report (paragraph 9.351) that a number of submissions sought this amendment. In particular I consider the effects are managed to acceptable levels as the aggregated nitrogen loss does not increase above the aggregated nitrogen baseline for the parcels of land forming the farming enterprise, and a Farm Environment Management Plan has been prepared. This amendment would implement, in my view, the intention of Policies 13.4.9 and 13.4.11 to maintain water quality in the Upper Hinds/Hekeao Plains Area. The matters Council would restrict its discretion to would be the conditions currently included Rule 13.5.10 (as amended by the s.42A Report recommendations).

Rule 13.5.11 (Page 13 of the Tracked Changes Version)

64. I note there are no amendments recommended in the s.42A Report to Rule 13.5.11. In its submission Ravensdown did not consider non-compliance with the stated conditions in Rules 13.5.9 or 13.5.10 would have adverse environmental effects or be contrary to the objectives and policies of the proposed Variation that would warrant non-complying activity status. I agree with this position, particularly as the water quality of the Upper Hinds/Hekeao Plains Area is required to be maintained by the relevant Policies 13.4.9 and 13.4.11.
65. Ravensdown sought restricted discretionary activity status for those activities that do not comply with the stated conditions, which discretion restricted to matters specifically related to nutrient management and achieving the catchment load. In my opinion, the restricted discretionary activity status Ravensdown sought for non-compliance with conditions 2 and 3 of Rule 13.5.9 is appropriate, the Council restricting its discretion to those matters

included in Ravensdown's submission. I would therefore seek for Rule 13.5.11 to be amended as follows:

"Rule 13.5.11 The use of land for a farming activity that does not comply with conditions 2 or 3 of Rule 13.5.9 ~~or condition 3 of Rule 13.5.10~~ is a restricted discretionary non-complying activity.

Matters for discretion relate to nutrient management and the catchment load, including:

1. The quality of, compliance with and auditing of the Farm Environment Plan; and

2. The ability to meet the nitrogen load target for farming activities in Table 13 (g); and

3. From 1 January 2017 the Good Management Practice Nitrogen Loss Rates to be applied - these Good Management Nitrogen Loss Rates are calculated based on for the baseline land uses; and

4. The potential benefits of the activity to the applicant, the community and the environment."

66. Furthermore, should you as Commissioners accept the restricted discretionary activity status for Rule 13.5.10 as proposed above, then it would be more appropriate for non-compliance with condition 3 of Rule 13.5.10 to be discretionary activity. I note in paragraph 9.245 of the s.42A Report that the submission by Horticulture NZ sought this amendment. This would require a new Rule 13.5.11A that would read:

"Rule 13.5.11A The use of land for a farming activity that does not comply with ~~conditions 2 or 3 of Rule 13.5.9 or condition 3 of Rule 13.5.10~~ is a discretionary non-complying activity.

Rule 13.5.12 (Page 13 of the Tracked Changes Version)

67. I note the s.42A Report does not recommend any amendments to Rule 13.5.12. In its submission Ravensdown expressed two concerns regarding this rule. Firstly, as discussed above, Ravensdown is concerned that the nitrogen baseline is being used as the 'backstop' to determine the activity status of farming activities, rather than the adoption of GMP as proposed in the policies.

68. Secondly, Ravensdown opposes in principle Variation 2 assigning prohibited activity status to the use of land for a farming activity where the nitrogen loss calculation exceeded the nitrogen baseline or is a farm enterprise in the Upper Hinds/Hekeao Plains Area. I agree with this concern.
69. In my opinion, such an approach is overly restrictive, unnecessary and inappropriate in the context of the water quality of the Upper Hinds/Hekeao Plains Area and the intent of the policies which is to improve management of nitrogen and phosphorus in both areas (Policy 13.4.9 (b)) and maintaining water quality (Policy 13.4.11). There are no requirements in the Zone Committee Solutions Package or the policies to avoid the effects of nutrient losses in the Upper Hinds/Hekeao Plains Area that could lead the plan reader to the possibility that prohibited activity status may be adopted in the rules.
70. Prohibited activity status removes all flexibility for Council to support appropriate farm practices and non-complying activity status provides the opportunity to address farming activities on a case by case basis to see whether any adverse environmental effects are more than minor and whether objectives and policies of the Plan can be met.
71. I agree with Ravensdown's request for Rule 13.5.12 to be amended to read:
"Rule 13.5.12 The use of land for a farming activity that does not comply with condition 1 of Rule 13.5.9 or condition 1 or 2 of Rule 13.5.10 is a ~~prohibited~~ non-complying activity."

Rule 13.5.14 (Page 13 of the Tracked Changes Version)

72. I note the s.42A Report makes several recommended amendments to Rule 13.5.14. In its submission Ravensdown considered Rule 13.5.14 was redundant and sought for it to be deleted.
73. On reflection and reading the s.42A Report, I disagree with Ravensdown's request to have Rule 13.5.14 deleted as I consider it is a critical mechanism to provide for land use change sought through Policy 13.4.13(c). I therefore support the overall intent of the rule, and would only seek two amendments.
74. Firstly, as already discussed above, I consider reference to the 27 kg N/ha/yr included in Condition 1 should be deleted and replaced with a reference to meeting GMPNLR to be determined through the MGM project. Secondly,

there is an issue with Table 13 (i) (included the amendments recommended in the s.42A Report) which I discuss latter in this evidence.

75. I would therefore seek the following amendments to Rule 13.5.14 (with amendments recommended in the s.42A Report shown in red):

“Rule 13.5.14 Despite any of Rules 13.5.15 to 13.5.20 the use of land for a farming activity or farming enterprise in the Lower Hinds/Hekeao Plains Area is a discretionary activity, provided the following conditions are met:

- 1. The ~~future~~³³ nitrogen loss calculation for the area of land subject to any application for resource consent made under this rule will ~~be less than or equal to~~ achieve from 1 January 2017 Good Management Practice Nitrogen Loss Rates~~27 kg per hectare per annum for the activity applied for;~~ and*
- 2. The ~~area of land subject to the application, in addition to the~~³⁴ total area of the land subject to any ~~existing~~³⁵ resource consent granted under this Rule ~~and any area of land subject to Row B of Table 13(i)~~ does not exceed 30,000 hectares; and*
- 3. The farming activity or farming enterprise is solely in the Lower Hinds/Hekeao Plains Area; and*
- 4. A Farm Environment Plan has been prepared in accordance with Schedule 7 Part A; and*
- ~~5. The Farm Environment Plan identifies the area of land subject to any application for a resource consent made under this Rule.~~³⁶”*

Rule 13.5.15 and 13.5.16 (Page 14 of the Tracked Changes Version)

76. In note there are no amendments recommended to Rules 13.5.15 and 13.5.16 in the s.42A Report. In its submission Ravensdown supported the permitted activity status for the use of land in the Lower Hinds/Hekeao Plains Area and sought for Council to retain the rules as written.

77. I support the s.42A Report recommendation to retain Rules 13.5.15 and 13.5.16 as written.

Rule 13.5.17 (Page 14 of the Tracked Changes Version)

78. I note the s.42A Report has suggested a number of changes to the matters of discretion by deleting discretion matters 3 and 4, and amending discretion matter 2 to read (red shows recommended amendments): “The *nitrogen loss*

rates to be applied to the property, including any staged reductions ~~ability to meet the nitrogen load target~~ for farming activities set out in Policy 13.4.13 in Table 13(g);”.

79. In its submission, Ravensdown expressed concern that it is not possible to determine the correct % reduction nitrogen loss rate beyond GMP nitrogen loss rates when these findings of the MGM Project that will determine the GMP nitrogen loss rates have not yet been released. Ravensdown also considered there are equitability issues when proposed Variation 2 is targeting one specific agriculture sector (dairy) rather than applying sound nutrient management rules to meet the plan objective regardless of the sector under which the activity falls. I agree with these concerns which I have already addressed in detail in this evidence.
80. Overall I support the restricted discretionary activity status provided for in Rule 13.5.17. The concerns I have (and Ravensdown raised in its submission) relate to the matters of discretion Council will consider why considering a consent application. In particular, the concerns regarding the % reductions have not been resolved by the amendments recommended in the s.42A Report as Table 13 (h) has simply been moved to Policy 13.4.13 which is now referenced in discretion matter 2. As I have discussed above, until the GMP numbers are known from the MGM Project, there is no way of knowing what the implications of the reductions might mean to a farming activity. The other concerns I have raised with Policy 13.5.13 above also apply and would have to be addressed before I can accept the amendments proposed to discretion matter 2. In addition, in my opinion discretion matter 3. should be retained with the following amendment:

“3. From 1 January 2017, the ability of the farming activity to meet Good Management Practice Nitrogen Loss Rates ~~to be applied for the baseline land uses; and~~”

Rule 13.5.18 (Page 15 of the Tracked Changes Version)

81. While Ravensdown did not submit on Rule 13.5.18 of the notified plan, I note the amendments to this rule recommended in the s.42A Report intend to implement the new Policy 13.4.13A. From this perspective I support the amendments proposed.

Rule 13.5.19 (Page 15 of the Tracked Changes Version)

82. I note there are no amendments recommended in the s.42A Report to Rule 13.5.19. In its submission Ravensdown noted that Rule 13.5.19 related to a farming activity either implementing Schedule 24a or preparing a FEP, and a farming enterprise needs to prepare a FEP. Ravensdown does not consider non-compliance with the stated conditions in Rules 13.5.15 - 13.5.18 would have adverse environmental effects or be contrary to the objectives and policies of the proposed Variation that would warrant non-complying activity status.
83. I agree with these concerns, for similar reasons discussed above in relation to Rule 13.5.11. While I accept the rule applies to the Lower Hinds/Hekeao Plain Area which has policy requirements to reduce nitrogen loss to improve water quality, I am still of the view the discretionary activity status is appropriate based on the potential adverse effects that might occur from the activities. This assumption is based on the fact that farmers will be working towards meeting GMP (from 1 January 2017) and % reductions at set time periods as required in the amended Policy 13.5.13. Discretionary activity provides the Council to consider any aspect of the farming activity, and to decline consent if warranted.
84. I therefore recommend Rule 13.5.19 be amended as follows:
“13.5.19 The use of land for a farming activity that does not comply with any of conditions 2 or 3 in Rule 13.5.15, conditions 3 or 4 of Rule 13.5.16, condition 3 of Rule 13.5.17, or a farming enterprise that does not comply with condition 3 of Rule 13.5.18, is a discretionary ~~non-complying~~ activity.” No

Rule 13.5.20 (Page 15 of the Tracked Changes Version)

85. I note there are no amendments recommended in the s.42A Report to Rule 13.5.20. In its submission, Ravensdown opposed in principle Variation 2 assigning prohibited activity status to the use of land for a farming activity where the nitrogen loss calculation exceeded the nitrogen baseline or is a farm enterprise in the Lower Hinds/Hekeao Plains Area. I agree and consider such an approach is overly restrictive, unnecessary and inappropriate for the same reasons discussed above relating to Rule 13.5.12.

86. I therefore recommend Rule 13.5.20 be amended as follows:
- “13.5.20 The use of land for a farming activity that does not comply with condition 1 of Rule 13.5.15, condition 2 of Rule 13.5.16, condition 2 of Rule 13.5.17 or conditions 1 or 2 of Rule 13.5.18 or a farming enterprise that does not comply with any of the conditions of Rule 13.5.14, is a non-complying ~~prohibited~~ activity.”*

Rule 13.5.21 (Page 15 of the Tracked Changes Version)

87. I note there are no amendments recommended in the s.42A Report to Rule 13.5.21. In its submission, Ravensdown supported the intent of Rule 13.5.21 and the permitted activity status assigned and sought for the rule to be retained as written. I therefore support the s.42A report recommendation to retain Rule 13.5.21 as it is written in the notified plan.

Rule 13.5.22 (Page 15 of the Tracked Changes Version)

88. I note there are no amendments recommended in the s.42A Report to Rule 13.5.22. In its submission, Ravensdown considers it is not possible to determine the correct % reduction loss rate beyond GMP nitrogen loss rates when these GMP loss rates have not yet been determined. This submission point was directed at Rule 13.5.22 that reads:

“2. The nitrogen loss calculation for the total area of the land will not exceed the nitrogen load calculated in accordance with Rows A and/or B in Table 13(i)”. In particular Table 13 (i) of the notified plan referenced the Good Management Practice Nitrogen Loss Rates as part of the calculations included in Row A. While the s.42A Report recommends no amendments to Rule 13.5.22, it does continue to refer to Table 13 (i) and the s.42A Report recommends amendments to Row A of that table which are unacceptable. I therefore agree with Ravensdown’s submission that reference to Table (i) should be deleted.

89. I therefore recommend Rule 13.5.22 be amended as follows:
- “2. The nitrogen loss calculation for the total area of the land will not exceed the nitrogen load included in Policy 13.4.12.~~calculated in accordance with Rows A and/or B in Table 13(i);~~ and*

3. *The total area of the land subject to any resource consent granted under Rule 13.5.14 and any area of land subject to Row B of Table 13(i) does not exceed 30,000 hectares.*”

Rule 13.5.23 (Page 16 of the Tracked Changes Version)

90. I note there are no amendments recommended in the s.42A Report to Rule 13.5.22. In its submission Ravensdown opposed in principle Variation 2 assigning prohibited activity status. I have already discussed above my agreement with this position and the reasons why, which are application to this rule. For this activity, I consider non-complying activity is justified and appropriate.

91. I would recommend Rule 13.5.23 be amended to read:

“13.5.23 The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene s15(1) of the RMA that does not meet one or more of the conditions in Rule 13.5.22 is a ~~prohibited~~ non-complying activity.”

Rule 13.5.24 (Page 16 of Tracked Changes Version)

92. I note there are no amendments recommended in the s.42A Report to Rule 13.5.24. In its submission Ravensdown supported permitted activity status for land use activity associated with discharges provided for in Rules 13.5.8 – 13.5.20.

93. I agree with this view, and the s.42A Report recommendation not to amend Rule 13.5.24.

Table 13(h) (Page 27 of Tracked Changes Version)

94. I note the s.42A Report recommends Table 13 (i) be deleted. The reason for this is because the % reductions contained in the table are recommended to be incorporated in Policy 13.4.13, as already discussed above.

95. In its submission Ravensdown supported a stepped reduction over a realistic timeframe to achieve the agreed and acceptable balance between meeting production potential and environmental protection. However, Ravensdown expressed concerns that Table 13(h) locks in unknown consequences when the

GMP nitrogen loss values are not yet determined or known and singles out the dairy and dairy support sectors alone as requiring reductions beyond GMP nitrogen loss rates. Ravensdown sought for Council to delete Table 13 (h) until such time as GMP nitrogen loss can be established.

96. While I have a number of issues with Policy 13.5.13 as discussed above in this evidence, I agree with the s.42A Report recommendation to delete Table 13 (h).

Table 13(i) (Pages 27 – 28 of Tracked Changes Version)

97. I note the s.42A Report amends Row A of Table 13(i) by deleting the term ‘*Good Management Practice Nitrogen Loss Rates*’ and replacing it with the term ‘*loss rates that could be reasonably expected from implementing good management practices*’ and replacing references to Table 13(h) with Policy 13.4.13.
98. In its submission Ravensdown notes that Table 13 (i) provides for stepped reduction in nitrogen load for the catchment over time. While Ravensdown supported the concept for a stepped reduction over a realistic timeframe to achieve the agreed and acceptable balance between meeting production potential and environmental protection, Table 13 (i) includes by reference Table 13 (h) which locks in unknown consequences with percentage reductions beyond GMP nitrogen loss values, which are yet to be determined (as discussed above).
99. In addition to these concerns, the amendment recommended by the s.42A Report to include the term ‘*loss rates that could be reasonably expected from implementing good management practices*’ raises a number of concerns as discussed in paragraph 48 above.
100. I recommend the s.42A Report recommendation to delete the GMPNLR term and replace it with a new term ‘*loss rates that could be reasonably expected from implementing good management practices*’ in Table 13 (h) be rejected, and the wording as notified retained, subject to GMPNLR being defined as per our discussion in paragraph 29 above.

Schedule 7 (Page 29 of the Tracked Changes Version)

101. I note the s.42A Report recommends the replacement of the term ‘*Good Management Practices Nitrogen Loss Rates*’ with the term ‘*loss rates that could reasonably be expected from implementing good management practices*’. As discussed above in paragraphs 48 of this evidence, I have a number of concerns regarding the proposed wording to replace the reference to GMPNLR.
102. I recommend the s.42A Report recommendation be declined and the notified version of Schedule 7 be retained.

Schedule 24a (Page 29 of Tracked Changes Version)

103. I note the s.42A Report recommends a number of amendments to Schedule 24a, including the following provisions:
 - “(ia) Where a material change in the land use associated with the farming activity occurs (being a change exceeding that resulting from normal crop rotations or variations in climatic or market conditions) the nutrient budget shall be prepared at the end of the year in which the change occurs, and also three years after the change occurs;*
 - (ib) Where a material change in the land use associated with the farming activity does not occur, the nutrient budget shall be prepared once every three years;*
 - (ic) An annual review of the input data used to prepare the nutrient budget shall be carried out by or on behalf of the landowner for the purposes of ensuring the nutrient budget accurately reflects the farming system. A record of the review shall be kept by the landowner.”*
104. In its submission Ravensdown noted that Schedule 24 – (a) (i) requires that nutrient budgets be reviewed annually. Ravensdown does not believe it is necessary to produce nutrient budgets annually and provided reasons why in its submission. Ravensdown sought for Schedule 24a to provide for a nutrient budget to remain valid for 3 years with records kept and reviewed annually by ECan.
105. The amendments recommended in the s.42A Report meet the key submission points raised by Ravensdown, and are supported.

106. Notwithstanding this support, I do question how the requirement for a nitrogen loss calculation¹ and the Schedule 24a requirement for a nutrient budget once every three years fit together? For example, Rules 13.5.9, 13.5.15, and 13.5.16 (all permitted activities) require both a nitrogen loss calculation (4 year rolling average, so four nutrient budgets) and to implement the Schedule 24a practices. As one provision requires an annual nutrient budget for compliance, and the other says good management practice is one nutrient budget every three years, there seems to be an overlap with provisions that requires some clarification.

Chris Hansen

15 May 2015

¹ Defined in Section 2.9 of the PCLWRP as: “means the discharge of nitrogen below the root zone, as modelled with OVERSEERTM, or equivalent model approved by the Chief Executive of Environment Canterbury, averaged over the most recent four year 01 July to 30 June period and expressed in kg per hectare per annum. If OVERSEERTM is updated, the most recent version is to be used.”