

**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 the Proposed  
Variation 3 to the  
Proposed Canterbury  
Land & Water  
Regional Plan  
(PCLWRP)

**TO BE HEARD BY**

Environment  
Canterbury

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

**25 September 2015**

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## **Introduction**

1. My name is Christopher Adrian Hansen and I am a Director and Principal 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 3 to the Proposed Canterbury Land & Water Regional Plan (PCLWRP). I assisted Ravensdown to review proposed Variation 3 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.

## **Background**

5. As outlined in its submission, within the Canterbury Region Ravensdown owns and operates a major fertiliser manufacturing plant in Hornby (one of 3 manufacturing plants in New Zealand – the others being Ravensbourne (Dunedin) 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. In addition to these facilities, Ravensdown operates a number of quarries that mine and process agriculture lime in various parts of New Zealand.

6. In the Waitaki – South Coastal Canterbury area, Ravensdown has a Company Fertiliser Store at Kurow, and a Consignment Fertiliser Store at Waimate.

### **Outline of Evidence**

7. I have divided my evidence into two parts: in Part One I will cover the key planning matters of importance to Ravensdown. The approach I will take to addressing these key planning matters includes:
  - An outline of the issues and any planning principles to be considered;
  - A review of the relief sought by Ravensdown in its submission;
  - A brief review of the s.42A Report recommendation regarding Variation 3 provisions;
  - Planning comment and recommendation.
8. In Part Two, I will cover the specific matters raised in Ravensdown’s submission in light of the recommendations included in the s.42A Report. My approach to the specific matters will include:
  - A brief review of the relief sought by Ravensdown in its submission;
  - A brief review of the s.42A Report recommendation regarding Variation 3 provisions;
  - Planning comment and recommendation as required.

### **Planning Evidence – Part One – Key Planning Matters**

9. The following ‘Key Planning Matters’ apply to a number of provisions or are matters that raise questions that require close consideration.

### **The Intentions of the CWMS and Waitaki – South Coastal Canterbury Vision for the Canterbury Water Management Strategy (CWMS) and ZIP Addendum**

10. In its submission Ravensdown supported the intent and vision of the CWMS that was prepared through a robust community consultation process, and reflects the water quality outcomes sought for the region by the people.
11. The need to balance the gaining of community outcomes while achieving the sustainable environmental outcomes included in the CWMS vision provides the context for the ZIP Addendum and subsequent plan changes to the PCLWRP to implement the relevant ZIP requirements. The Vision (and principles) of the CWMS are required to be given *particular regard to* when

making decisions on Variation 3 by the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2009.

12. In addition, in its submission Ravensdown supported the outcomes sought in the ZIP Addendum for the South Coastal Canterbury for the three areas identified:
  - Waihao-Wainono – to hold the line at the current water quality and improve over time the TLI score to 6.0 (or better) [currently 6.5] and provide for a 90% protection level for nitrate toxicity in the system;
  - Northern Streams – to provide for a 90% protection level for nitrate toxicity – further development based on Good Management Practice (GMP) – GMP is sufficient to meet water quality outcomes;
  - Morven Drain and Sinclairs Creek – to hold the line at current groundwater quality, which will require GMP and FEPs – GMP is sufficient to meet water quality outcomes.
13. Ravensdown also acknowledged a range of mechanisms the ZIP Addendum includes to achieve these outcomes including Catchment Groups; Farm Environment Plans (FEPs); on-farm actions – sediment traps; stream battering; wetland rehabilitation etc.; set GMP requirements for agricultural, urban and industrial discharges; use a simple framework to support limits implementation (emphasis added); augment Wainono Lagoon; cap current water allocation and reduce over-allocation over time; secure future functioning of the Waihao Box.
14. Ravensdown also noted there is a clear intention in the ZIP Addendum that the findings of the Matrix of Good Management (MGM) Project would replace the numbers included in Table A of Appendix 2<sup>1</sup>. The ZIP Addendum also anticipates GMP numbers for farming systems for all three areas would be updated in 2015 at the completion of the MGM project.
15. Ravensdown expressed concern that the outcomes sought by the ZIP Addendum, which are pragmatic and responsible responses to the water quality issues facing the three areas, are not being accurately implemented through the provisions of Variation 3. As highlighted above, the ZIP Addendum seeks a simple framework to support the implementation of limits.

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<sup>1</sup> See note at the bottom of Table A; Appendix 2; Page 22 of ZIP Addendum

16. To address the above matters regarding the CWMS and ZIP Addendum, Ravensdown sought Variation 3 to:
- Ensure the outcomes and intentions of the ZIP Addendum to be clearly followed through into the provisions of Variation 3 (as sought in specific submission points addressed below);
  - Provide a clear statement to be included in Variation 3 that outlines the process by which the GMP numbers that result from the MGM Project will be incorporated into Variation 3 to replace the current flexibility cap and maximum cap numbers;
  - Review the policy and rule regime to introduce a simplistic framework to implement the limits set.
17. The s.42A Report summarises the history of the CWMS in Section 3 and the role of the Zone Committee and contents of the ZIP Addendum in Section 4. In paragraph 6.181 the s.42A Report recognises that Ravensdown (amongst others) has raised a concern that Variation 3 does not adequately reflect the Nitrogen Allocation Reference Group agreement and/or the ZIP Addendum. The Report goes on to suggest that the CWMS and ZIP Addendum are documents decision makers can place weight on in the context of Variation 3.
18. In my opinion, the s.42A Report does not address the concern raised by Ravensdown and provides no support or evidence that the Vision of the CWMS has been given *particular regard* to when considering a number of the provisions contained in Variation 3 which do not support the CWMS Vision (as discussed further below). I do not accept that simply relegating these key documents to ones that can be given weight to by decision makers is appropriate or meeting the requirements of the ECan Act.
19. In addition, the Vision and ZIP Addendum contemplates a simplistic framework approach to achieving the community agreed outcomes. In my opinion the policy and rule regime incorporated into Variation 3 is complex and confusing, and not the simple framework anticipated by the Zone Committee who prepared the ZIP Addendum (I provide examples of this complexity in more detail when I consider the ‘hurdles’ a resource user has to negotiate when addressing the s.32 Evaluation Report below). Furthermore, the provisions are not consistent with the more straightforward approaches

developed previously in Variation 1 and 2 and the proposed approach anticipated in Variation 5 (MGM).

20. The S42A Report does not accept that the provisions from the MGM Project should be included in Variation 3. This is despite the current ZIP Addendum (dated September 2014) stating that the '*Sub Regional section is updated with GMP numbers (N in kg/ha/yr) for farming systems in 2015 at the completion of the Matrix for Good Management MGM project*' ZIP Addendum; Recommendation 1.13; Page 8) and that all farms should reach GMP for N loss from 2017. The s.42A Report considers including the provisions of MGM outside the scope of Variation 3 as notified (paragraphs 6.249 and 6.250). This view seems to be contrary to the intent of the ZIP Addendum, and also contrary to the fact that there are submissions that provide the scope to Council to include these provisions if it wished to.
21. I therefore consider the concerns raised by Ravensdown have not been adequately considered in the s.42A Report and addressed as sought by Ravensdown. I would recommend amendments be made to Variation 3 to ensure the outcomes and intentions of the ZIP are clearly followed through into the provisions of Variation 3, and a clear statement included that outlines the process by which the GMP numbers that result from the MGM Project will be incorporated into Variation 3 to replace the current flexibility cap and maximum cap numbers. As I discussed further below in my evidence, I also recommend a review of the policy and rule regime to introduce a simplistic framework to implement the limits set as intended by the ZIP Addendum.

## **Section 32 Report**

### GMP and Consents Regime

22. In its submission Ravensdown:
  - Supported the key premise that the overarching expectation in Variation 3 is that all farming practices will operate at GMP<sup>2</sup>;
  - Noted that farming activities are required to gain resource consent if their nitrogen leaching loss exceeds the greater of the nitrogen

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<sup>2</sup> Section 32 Report; Section entitled *Improving Water Quality and Ecological Health*; paragraph one; page ii

baseline or flexibility cap for the respective areas, or if they exceed the maximum cap; and

- Farming activities also require consent if they form part of a Nutrient User Group or Farming Enterprise<sup>3</sup>.

23. However, Ravensdown raised two concerns regarding these matters:
- Variation 3 adopts ‘interim’ GMP numbers without a mechanism to incorporate the GMP numbers for farming systems that will eventuate from the MGM Project, as anticipated by the ZIP Addendum.
  - The consents regime that has been set up does not reference the fact that some farming activities are prohibited activities (and resource consent cannot be applied for), and Variation 3 develops a complex set of terms and circumstances that mean a number of consents may be required for a farming activity.
24. Ravensdown considered that as a result of these matters the resource user is faced with a number of ‘hurdles’ that need to be negotiated (exceeding the nitrogen baseline OR flexibility cap OR maximum cap OR is part of a Nutrient User Group OR a Farming Enterprise; and load limits for farming) and that in all of these scenarios a consent is required (or in some cases no consents can be applied for).
25. Ravensdown also noted that some of the mechanisms relate to different matters as a flexibility cap relates nitrogen losses to a specific area while a maximum cap relates to a property’s soil texture or drainage capacity. These different approaches may cause additional challenges for resource users creating uncertainty and confusion and add additional layers of complexity for the implementation of Variation 3. As I have discussed above, in my opinion this additional complexity is contrary to the intent of the ZIP Addendum.
26. These complexities are further highlighted as the flexibility cap and maximum cap are both assessed against an Overseer nutrient budget (nitrogen loss calculation). However, the flexibility cap limit is determined by the location of the property (that is, in the Waihao/Wainono Plains and Hills, Northern Streams Plains and Hills), while the maximum cap limit is determined by soil

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<sup>3</sup> Section 32 Report; Section entitled *Improving Water Quality and Ecological Health*; paragraph five/six; pages ii/iii

texture or drainage capacity and is not location dependent (except that it only applies to the Northern Streams and Waihao/Wainono).

27. In its submission Ravensdown questioned whether this vigorous regulatory approach is anticipated from the implementation of the ZIP Addendum which clearly envisaged water quality in two of the three areas being managed by GMP and FEPs adopting a simplistic framework.
28. In my opinion, these submission points further demonstrate the concerns I have raised above relating to whether the Vision of the CWMS has been given particular regard to, and whether Variation 3 achieves the outcomes of the ZIP Addendum as anticipated by the community. I conclude that Variation 3 does not develop a simplistic framework in its policy and rule regime, and instead is overly complex and unworkable with the layers of mechanisms and requirements it introduces. While overall I support the introduction of the flexibility cap mechanism, as discussed further below, in my opinion the maximum cap is unnecessary and can be deleted.

#### Introducing MGM Project Numbers into Variation 3

29. In its submission Ravensdown noted the s.32 Evaluation Report makes a clear statement that Variation 3 does not anticipate how the outputs of the MGM Project will be brought into the planning framework of the PCLWRP, or the interface with the nutrient policies, rules and limits within Variation 3 itself<sup>4</sup>. This matter has been discussed above, and is a key planning concern to Ravensdown.

#### Efficiency of Variation 3: Nitrogen Limits

30. In its submission Ravensdown noted the evaluation of the efficiency of Variation 3 Nitrogen Limits in Table 21<sup>5</sup>. In particular Ravensdown:
  - Expressed concerned that the economic costs and benefits evaluation determines that a small cost is anticipated from the nitrate-N limits

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<sup>4</sup> Section 32 Report; Section entitled *Variation 3 and the Matrix of Good Management Project*; paragraph 2; page iv; Section 1.2 entitled *About Variation 3*; paragraphs 4/5; page 1-2

<sup>5</sup> Section 32 Report; Section 7.3.3 *Efficiency of Variation 3: Nitrogen Limits*; Table 21; pages 7-19/7-20



and suggests the costs reflects the requirement for high leachers to operate at GMP / meet the maximum cap for nitrogen loss;

- There seems to be no consideration of the costs associated with the complex consenting regime that is included in Variation 3 which would fall on the resource user and Council, and the lost opportunity costs to the region of adopting non-complying and prohibited activity status.

31. Ravensdown questioned the robustness of the economic assessment of the efficiency of the nitrogen limits adopted in this context.
32. I note the s.42A Report addresses this matter in paragraph 10.144. In paragraph 10.146 the s.42A Report states: *“While the Section 32 Report has not quantified lost opportunity costs, it is my understanding that a conservative economic assessment against the current LWRP provisions would not change the outcome presented in the assessment table.”* Furthermore, in paragraph 10.147 the s.42A Report notes that the s.32 Evaluation does not contemplate the costs associated with obtaining necessary resource consents under the proposed regime, but that any costs would be relevant to the scale and significance of the activity.
33. In my opinion the s.42A Report has missed to point being made by Ravensdown in its submission, and in particular that the costs associated with such a complex policy and rule regime have not been properly recognised, and assessed against other alternative such as GMP and a simplistic rule regime as anticipated by the ZIP Addendum. Furthermore, I disagree with the statement that costs would be relevant to the scale and significance of the activity. As I have discussed above, the ‘hurdles’ that are require to be met by a resource user will mean consent will be required for relatively straight forward activities, and it seems relatively easy for such an activity to be non-complying meaning further s.104D tests are required before the consent can be considered. In my experience, the costs associated with preparing non-complying activity consents can be large, and not necessarily proportional to the scale and significance of environmental effects of the activity. Furthermore, the cost of not being able to apply for consent (i.e. a prohibited activity) is not adequately assessed, in my opinion, in the s.32 Evaluation Report.

Effectiveness of Variation 3: Meeting Nitrogen Limits for Northern Streams, Waihao River and Wainono Lagoon

34. In Table 36 of the s.32 Evaluation Report<sup>6</sup>, there is an assessment of the proposed nutrient allocation and management framework (Rule 15.5.1 – 15.5.19) that states in relation to Objective 3.7 of the PCLWRP: *“The nutrient allocation and management framework in Variation 3 (rules 15.5.1 to 15.5.19) provides a clear path to meeting the catchment nitrogen load limits within the Northern Streams and Waihao-Wainono areas. The rules provide a good balance between being permissive and regulation.... Overall, the rules to achieve the nitrogen limits in Variation 3 contribute positively to achieving in-stream and out-of-stream values required under this objective although there remain some concerns around the quality of shallow groundwater.”*
35. Ravensdown questioned the above assessments and does not agree that a clear pathway is provided to meeting catchment nitrogen load limits, as discussed below in this evidence. Ravensdown expressed concern that the s.32 Evaluation Report has not assessed the real economic costs and benefits of adopting a complex and confusing rule regime. I agree with Ravensdown’s concerns.
36. In response to the above matters relating to Ravensdown’s assessment of the s.32 Evaluation Report, it sought the following:
- A review of the regulatory approach developed in Variation 3 to better reflect the intentions of the ZIP Addendum;
  - To include a mechanism within Variation 3 to incorporate GMP numbers once the findings of MGM Project are available;
  - A review of the complex nutrient management regime adopted in Variation 3;
  - If a review is rejected, re-evaluate the economic costs and benefits of the complex regime currently included in Variation 3.
37. I acknowledge that the relief sought by Ravensdown is similar to those discussed above in regards to the CWMS and ZIP Addendum, and the same

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<sup>6</sup> Table 36 - Effectiveness of Variation 3 for Managing to Nitrogen Limits in Northern Streams and Waihao - Wainono Areas; Section 8.2.2; Page 8-15

comments above apply. Similarly the response to Ravensdown's submission points in the s.42A Report has also been discussed above. The one difference relates to the re-evaluation of the economic costs and benefits, which I have discussed in this section above.

38. In order to meet Ravensdown's concerns I would recommend a simplistic framework as anticipated by the CWMS and the ZIP Addendum, and one that mirrors Variation 1 and 2 in terms of reaching GMP by a certain date and reducing beyond either in certain areas or by certain land uses.

**Use of Nitrogen Baseline; Flexibility Cap and Maximum Cap to determine activity status**

39. In previous submissions on Variation 1 and 2 to the PCWRP, Ravensdown has expressed concern that the nitrogen baseline is being used in the plan(s) as a 'default mechanism' to determine the activity status of land use for farming activities, and in particular prohibited activity status if the nitrogen baseline is exceeded. Ravensdown understood that the purpose of the nitrogen baseline is 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.
40. While Variation 3 has also adopted the same approach, albeit with some scenarios where the nitrogen baseline may be exceeded, it also uses the newly introduced flexibility cap and maximum cap to also determine activity status (including prohibited activity status for exceedence). In its submission Ravensdown indicated it continues to oppose the use of these mechanisms to determine the activity status of land uses. I would reiterate that their purpose is to assist with managing nutrient losses, not to determine activity status.
41. Ravensdown considered that Variation 3 underplays the importance of the nitrogen baseline in the policies<sup>7</sup>. The nitrogen baseline is a key mechanism in the Variation 3 regime because in accordance with Rule 15.5.2 (1) and (2) every resource user needs to know what their nitrogen baseline is as they have the option of ensuring that the nitrogen loss calculation does not exceed the

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<sup>7</sup> In particular Policies 15.4.7(b); 15.4.9(b), 15.4.10, and 15.4.12(b)(ii)

greater of the flexibility cap or the nitrogen baseline, hence it is important in case it is higher than the flexibility cap.

42. In addition, Ravensdown questioned why the maximum cap has been introduced into the nutrient management regime. While it accepted that the ZIP Addendum flags the possibility that a maximum cap be introduced, Ravensdown considered that Variation 3 should adopt MGM numbers which would effectively take the place of the maximum cap. This would mean that a resource user could not exceed their MGM number, as well as not exceeding their nitrogen baseline, as in Variation 1 and 2. Ravensdown considered this approach would be in accordance with the ZIP Addendum as all farms are required to meet GMP.
43. To address these matters Ravensdown sought:
- A change the activity status that apply to the use of land for farming activities that exceed the nitrogen baseline, flexibility cap from prohibited to non-complying activity;
  - Delete all provisions in Variation 3 that incorporates a maximum cap mechanism; and
  - Ensure the relevant policies identify the importance of the nitrogen baseline in the rule regime.
44. In relation to the activity status and the response in the s.42A Report, I discuss this matter in Part Two of my evidence in reference to particular rules. Overall the s.42A Report does not accept that a change in activity status is required and the prohibited activity status of rules is recommended to be retained as notified. I address the matter of prohibited activity status below.
45. In relation to deleting provisions that incorporates a maximum cap mechanism, the s.42A Report identifies in paragraph 10.109 that Ravensdown's request to remove reference to the maximum caps and replace them with the MGM GMP values is not considered appropriate for reasons outlined at the beginning of Section 10 of this report (presumably referring to paragraphs 10.17 – 10.27 under the heading "*Aligning with the MGM Project*"). It is not entirely clear to me from reading these paragraphs why the s.42A Report considers why replacing maximum caps with MGM GMP values is not appropriate. There is a discussion suggesting that Variation 5

(which is proposed to introduce MGM GMP values into the PCLWRP at the regional level) may not be a good fit for Variation 3's specific purpose as it does not provide a specific method to calculate the maximum and flexibility caps, which are considered critical components of the Variation 3 solution package to enable development while achieving freshwater objectives. I have discussed above why I consider a maximum cap is not an appropriate mechanism, and it is not surprising to me Variation 5 is likely to take a different approach.

46. Essentially the s.42A Report retains the maximum cap mechanism and rejects Ravensdown's submission. Part of the reason given is that "... *the purpose of the MGM Project was to inform proposed changes to the region-wide nutrient management provisions*" (paragraph 1021). I am advised by Ravensdown's staff that this is not a true statement and I have attached information from the July 2015 MGM Information Sheet and ECan's own website on why MGM will be useful. I also note that both Variations 1 and 2 include nutrient management provisions that require farming activities to achieve GMP as determined by MGM by a set timeframe.
47. In my opinion retaining the maximum cap provision and not adopting the MGM GMP values is contrary to the intent of the ZIP Addendum and not good practice for reasons I have discussed above.
48. In relation to ensuring relevant policies identify the importance of the nitrogen baseline in the rule regime, the s.42A Report does not seem to specifically address this request from Ravensdown.
49. Overall I am still of the opinion after reading the s.42A Report that prohibited activity status for the use of land for farming activities that exceed the nitrogen baseline or flexibility cap is inappropriate and not justified for reasons I discuss further below. I am also of the view that the maximum cap should be deleted and replaced with a reference to achieving GMP as determine by the MGM as intended by the ZIP Addendum and to ensure nutrient management mechanisms are appropriate and simple in approach.

#### **Adoption of Prohibited Activity Status**

50. In its submission Ravensdown noted that the policies of Variation 3 are generally enabling and look to: improve; achieve; meet; manage; enable etc.

water quality in the Waitaki - South Coastal Canterbury Area. Ravensdown particularly noted that only Policy 15.4.3 and Policy 15.4.11 uses the terms avoided/avoid. In the case of Policy 15.4.3, Ravensdown seeks an amendment that would replace this term, as outlined below in Part II of its submission. Ravensdown generally supported the enabling intent of the policies in Variation 3.

51. Ravensdown therefore did not expect that Variation 3 would adopt prohibited activity status for activities that cannot meet conditions of permitted (in the case of Rule 15.5.5) or discretionary activities (in the case of Rule 15.5.8 and Rule 15.5.10).
52. In order to address these concerns Ravensdown sought deletion of the prohibited activity status included in Rules 15.5.5; 15.5.8 and 15.5.10, as discussed in detail in Part II of this evidence below.
53. The s.42A Report provides a useful discussion on the prohibited activity status of rules in paragraphs 6.252 – 6.254. This includes a summary of the case law regarding circumstances that may warrant prohibited activity status and the use of these circumstances to test whether the imposition of prohibited activity status is the most appropriate of the options available.
54. I also note in paragraphs 10.206 – 10.209 the s.42A Report (indirectly) agrees with a number of points raised by Ravensdown, including that the s.32 Evaluation Report does not provide a comprehensive comparative assessment of alternatives (i.e. a discretionary activity may be a plausible alternative). The Report goes on to state: *“Taking into consideration the assessment against the legal test (above) and information provided in submissions, on balance I do not consider that a prohibited activity is appropriate for farming activities that exceed their nitrogen baselines or appropriate flexibility caps in every instance.”* The s.42A Report recommends a number of amendments to the rule regime (Rules 15.5.1 – 15.5.5) to provide for activities that otherwise would have been prohibited under notified Variation 3.
55. The s.42A Report recommends the prohibited activity status be retained for Rule 15.5.8 *“to protect the integrity of the consent process for an application for the use of land that forms part of a Farming Enterprise”* (paragraph 10.270); and for Rule 15.5.10 *“to protect the integrity of the consent process for an application for the use of land that forms part of a Nutrient User Group*

*and to prevent any opportunity for a consent application to be lodged for any other form of Nutrient User Group concept that sits outside the planning framework”.*

56. While I accept that Council can adopt a prohibited activity status if it has been through a robust assessment of options process, and that adopting a policy that intends to avoid an effect may lead to a prohibited activity, I consider in the case of Rules 15.5.5, 15.5.8, and 15.5.10 there is no justification in the water quality outcomes sought through the ZIP Addendum, and the evaluation of options in the s.32 Evaluation Report, that would justify prohibited activity status being adopted.
57. Furthermore, I agree with the s.42A Report evaluation of the level of assessment undertaken in the s.32 Evaluation Report, and the conclusion that prohibited activity status may not be appropriate and other options (such as discretionary activity) are a plausible alternative when considering Rule 15.5.5. In my opinion, this very same conclusion can be drawn when considering the prohibited activity status of Rules 15.5.8 and 15.5.10. The reason for this is I consider the s.42A Report has not rightly considered the purpose of the MGM GMP values, and has wrongly assessed that this approach is not applicable to the area covered by Variation 3.
58. While I say above I agree with the findings of the s.42A Report in regards to Rule 15.5.5, and generally support the amendments recommended to the rule regime in Rule 15.5.1 – 15.5.5, I do not agree that prohibited activity should be retained for Rule 15.5.5, or that Rules 15.5.8 and 15.5.10 be retained as notified. I am still strongly of the opinion that the s.32 Evaluation Report is inadequate and there are other plausible options that have not been assessed that provide for the water quality outcomes of the ZIP Addendum and allow Council to manage the effects of activities, including avoiding adverse effects, without adopting a prohibited activity rule regime.
59. I therefore recommend the relief sought by Ravensdown be adopted, and the s.42A Report recommendation to retain the prohibited activity status in Rules 15.5.5, 15.5.8 and 15.5.10 as notified be rejected.

## **Part Two: Specific Submission Points**

### **Plan Provision: Definitions (Page 15-4)**

60. In its submission, Ravensdown expressed concern about the number of terms and the complexity of the regulatory regime included in Variation 3. The key concerns are:

- While ‘existing’ and ‘new’ farming activities are defined, this is only by way of a date being before or after 1 May 2015 and there is a need for a ‘*farming activity*’ to be clearly defined - the ‘existing’ and ‘new’ farming activities definitions do nothing to address this concern and create uncertainty;
- There is a need to amend the definition of ‘*flexibility cap*’ to ensure it is modelled by an Overseer nutrient budget, using the latest version of Overseer available;
- The definition of ‘*maximum cap*’ to be deleted as Ravensdown seeks the mechanism to be deleted as discussed above;
- Because the definition of nitrogen baseline has been amended to be applicable to four distinct areas, there is a need to also include an amended definition of ‘*nitrogen loss calculations*’ that are also applicable to the same four areas, to ensure that an accurate comparison of historic and current nitrogen losses can be assessed.

61. To address these matters Ravensdown sought to:

- Define the term ‘*farming activity*’ as follows (or similar): “***farming activity*** means the use of land for the production of primary products including agricultural, pastoral, horticultural and forestry products”;
- Add to the term ‘*existing farming activity*’ the following (or similar): “and includes all activities undertaken during the period of period 01 July 2009 – 30 June 2013 whether seasonal or rotational.”
- Add to the term ‘*new farming activity*’ the following or similar: ““*this excludes routine rotational land use activity within a Farming Enterprise, Nutrient User Group or Irrigation Scheme when there is no significant increase in land area used for that activity within a catchment*”;
- Amend the definitions of ‘*flexibility cap*’ by adding the term: ‘as modelled with OVERSEER<sup>TM</sup>, or equivalent model approved by the



*Chief Executive of Environment Canterbury. If OVERSEER<sup>TM</sup> is updated, the most recent version is to be used”;*

- Delete the term ‘*maximum cap*’; and
  - Provide a new definition of ‘*nitrogen loss calculation*’ that applies specifically to the four areas in order to be consistent with the nitrogen baseline definition amendment.
62. By way of a general planning statement, in my opinion and adopting a first principles planning approach, properly defining any term in a plan is critical for the resource user to determine how or whether the plan affects them and to provide guidance to the Council officers implementing the plan provisions. It is in this context that I make the following comments.
63. Ravensdown has sought a ‘*farming activity*’ definition within other ECan plans and variations, without success, and once again the s.42A Report (which deals with Ravensdown’s submission in paragraph 13.57) rejects defining this key term. In its submission Ravensdown has provided examples of situations where defining farming activity is important, and has provided wording for a definition of farming. One obvious reason is so that when ‘new’ or ‘existing’ farming activities are defined, routine land uses that rotate around the farming operation are excluded. In my opinion and as outlined in Ravensdown’s submission, there are situations that would benefit from having this definition included in policies and rules throughout Variation 3, and I recommend Ravensdown’s proposed definition be adopted.
64. In relation to the ‘*existing farming activity*’ definition, I note the s.42A Report recommends an amendment in paragraph 13.62. I support the recommended amendments.
65. In relation to the ‘*new farming activity*’ definition, I note the s.42A Report recommends the definition be retained as notified, although this is confusing as paragraph 13.59 states that both the current ‘new’ and ‘existing’ land use definitions do not provide sufficient direction to the plan user, and paragraph 13.60 recommends both definitions are amended (last sentence). I therefore do not understand the recommendation to retain the ‘*new farming activity*’ definition as notified, and can only assume this is an error. In my opinion, there needs to be a clear distinction as to when an activity is existing or new,

and the notified version does not provide this guidance (as stated in the s.42A Report). An example would be crop rotations where the crop rotation is part of a long term programme and is not a new activity for the catchment, even though it is not being grown on a specific property on 1 May 2015. I therefore recommend the '*new farming activity*' definition is adopted as recommended by Ravensdown.

66. In relation to the '*flexibility cap*' definition, I note the s.42A Report comments in paragraph 13.73 that the requested amendments do not provide any improvement on the existing definition, and recommends the definition is retained as notified. I support the concept of a flexibility cap, but I consider the relief sought by Ravensdown is necessary and appropriate, if only so the definition remains consistent with the nitrogen loss limits in Variation 1 and 2. The amendment to the definition relates to compliance and what is needed if OVERSEER<sup>TM</sup> is updated, and is not, in my opinion, covered by the foot note added to Table 15(m) and (n) as recommended in the s.42A Report.
67. In relation to the '*maximum cap*' definition, I note the s.42A Report recommends it be retained as notified as it is an important mechanism in the plan to reduce nitrogen losses (paragraph 13.74). I do not agree with this recommendation, for the reasons already discussed above in this evidence.
68. In relation to the new definition of '*nitrogen loss calculation*', I am unable to find any place in the s.42A Report that addresses this request by Ravensdown. The reason why a new definition is requested is because the current definition of '*nitrogen loss calculation*' in Section 2 of the PCLWRP is averaged over a property and does not recognise that there are four distinct areas that require a separate nitrogen baseline in the area covered by Variation 3. Therefore the comparison between the historical losses and current losses may not be accurate. While Ravensdown accepted this adds further work (and possibly complexity) to the nutrient management regime (which it is seeking through this submission to avoid), it considers this is a necessary amendment to respond to the approach being taken. I agree with this concern and recommend a new definition as requested.

**Plan Provisions:** Policy 15.4.2 (Page 15-5)

69. In its submission Ravensdown considered the policy is poorly written and does not read well.
70. Ravensdown considers Policy 15.4.2 could be improved by amending it to read (or similar):  
*“Achieve the water quality outcomes for the Northern Streams Area, Waihao-Wainono Area and the Morven-Sinclairs Area by ~~not exceeding~~ ensuring the nitrogen load limits in Tables 15(o) and 15(p) are not exceeded in accordance with the timeframes listed.”*
71. I note the s42A Report recommends Policy 15.4.2 be deleted and that Policies 15.4.1, 15.4.2 and 15.4.4 be combined as they reduce complexity of the plan provisions while retaining the intent of the plan.
72. While in principle I have no issue with combining policies to reduce complexity, this will only achieve success if the new policy is clearly written and incorporated the intent of the policies it is replacing.
73. While Ravensdown did not submit on the notified Policy 15.4.1 as it was acceptable, significant changes are recommended to meet submissions, including on other policies. Overall I support the new Policy 15.4.1 recommended, subject to amendment. In particular, I do not support the use of the term ‘*or better*’ in Clause b) as this requirement is more than required in the ZIP Addendum which seeks farming activities to reach GMP for the four distinct areas. While a farmer can go beyond GMP if they wish, reaching GMP will achieve the water quality outcomes sought and the policy should reflect the ZIP on this matter. I therefore recommend the term ‘*or better*’ be deleted from Clause b).
74. I also do not support Clause d) as it is currently written as I consider the wording is poor and could be written better to reflect the original intent of the notified Policy 15.4.2. I recommend Clause d) be deleted and replaced with the following wording (or similar): *“d) requiring the cumulative nitrogen losses from urban and industrial discharges and farming activity respectively to not exceed the load limits in Tables 15(o) and 15 (p) at the timeframes specified”*.

**Plan Provision: 15.4.3 (page 15-5)**

75. In its submission Ravensdown noted that Policy 15.4.3 applies to the same areas as Policy 15.4.2, but takes a different approach which is confusing. Policy 13.5.3 requires the nitrogen load limit to be ‘met’ while Policy 15.4.2 requires the nitrogen load to not be exceeded. In addition, Policy 15.4.3 includes a mechanism of ‘*avoiding the movement of nitrogen between the hills and plains areas*’. Ravensdown presumed Policy 15.4.3 relates to how the plan seeks to separate the nitrogen baseline in the hill and plains areas (as per the definition of nitrogen baseline) and Rules 15.5.2 – 15.5.5 (and Table 15(m)) that have different minimum nitrogen loss figures (flexibility caps) for hill areas and plains areas.
76. Ravensdown opposed Policy 15.4.3 for a number of reasons including:
- It is impracticable to avoid the movement of nitrogen between the Hill Area and Plains Area, as this is exactly what happens in the environment - nutrients travel down the catchment through the movement of water, and this movement cannot simply be ‘avoided’;
  - It is not clear what mechanisms Council would expect the resource user to use to avoid this naturally occurring event;
  - This separation of the Hill and Plains areas means that implementing the rules could be quite difficult for properties that span both of these areas - in particular there are issue regarding which property the nitrogen might originate from, and it may not be from the property adjoining the Plains Area.
77. Overall Ravensdown considered Policy 15.4.3 is unworkable and unnecessary as the water quality outcomes are required to be achieved under Policy 15.4.2, and should be deleted.
78. I note the s.42A Report addresses Ravensdown’s submission in paragraph 10.70 and recognises the wording of Policy 15.4.3 is ambiguous and requires amendment to clarify its intent. The s.42A Report recommends the term ‘*movement*’ be amended to ‘*sharing of allowable nitrogen loss rates*’.
79. In my opinion, the recommended amendment does little to address the fact Policy 15.4.3 is ambiguous and confusing, and the same issues raised by Ravensdown regarding a property that straddles the hills and plains area

remains. I also note in paragraph 10.73 the s.42A Report uses the nitrogen baseline definition to support intent of the amended policy, but I fail to see the relevance. The nitrogen baseline is historic nitrogen losses, not current or future nitrogen losses, and therefore if the intent is to ‘avoid’ properties sharing nitrogen losses in the future between the Hill and Plains areas, then there is a need to include a definition for nitrogen loss calculation that mirrors the nitrogen baseline definition, as requested by Ravensdown (and discussed above).

80. Based on the above and after reviewing the s.42A Report, I am of the opinion that Policy 15.4.3 (with amendments) is still ambiguous and confusing as the resource user cannot share a nitrogen loss rate between the areas. This is because it is a nitrogen loss rate, which is a measurement, rather than a load. I recommend Policy 15.4.3 be deleted as requested by Ravensdown.

**Plan Provision:** Policy 15.4.4 (Page 15-5)

81. In its submission Ravensdown supported Policy 15.4.4 and the requirement that all farming activities operate at GMP and the preparation and implementing of a FEP when resource consent is required. Notwithstanding this support, Ravensdown did not support all farming activities to operate at GMP or better. This requirement is not stated in the s.32 Evaluation Report on page 8-5 where it assesses the Variation 3 nitrogen limits and allocation framework – it simply says “...*all farming activities to meet nitrogen loss rates under good management practice...*”, nor in the ZIP Addendum as discussed above. Ravensdown considered this additional requirement is unnecessary and can be deleted.
82. In addition, Ravensdown noted that the s.32 Evaluation Report requires that all farms need to meet the GMP nitrogen loss rates, not just operate at GMP as it says in this policy. Ravensdown considers the policy should reflect the s.32 Report requirement.
83. To address these concerns Ravensdown sought the retention of the intent of Policy 15.4.4, while amending (a) to read:  
“(a) *all farming activities to ~~operate at~~ meet nitrogen loss rates under good management practice ~~or better~~; and”*

84. As discussed above, the s.42A Report recommends Policy 15.4.4 be deleted and combined into a new Policy 15.4.1. The matters included in Policy 15.4.4 are incorporated into Clause d) of the new Policy 15.4.1.
85. Overall I support the recommendation to delete Policy 15.4.4, subject to the amendment to Clause b) sought above in relation to Policy 15.4.2 (paragraph 73 of my evidence).

**Plan Provision: Policy 15.4.5 (Page 15-5)**

86. While Ravensdown generally supported the intent of Policy 15.4.5 in its submission, as discussed above, Ravensdown did not accept the maximum cap mechanism is a valid approach, and sought its deletion. Instead, Ravensdown considered that Variation 3 should adopt MGM numbers which would effectively take the place of the maximum cap. This would mean that a farm could not exceed their MGM number, as well as not exceeding the nitrogen baseline, as in Variation 1 and 2. As 1 May 2015 has past, it may be more appropriate to apply the policy after 2017.
87. In addition, as Policy 15.4.5 distinguishes between existing and new farming activities, Ravensdown considers there is still a need to define what a 'farming activity' is so it can be determined if it is new or existing, as discussed above.
88. To address these matters Ravensdown sought the intent of Policy 15.4.5 to be retained while amending it to read as follows:
- *“Improve water quality in the Northern Streams Area and Waihao-Wainono Area by requiring:*
    - (a) all existing farming activities, except those on extremely light soils as shown on the Planning Maps, to ~~comply with~~ meet the maximum cap good management practice value by 1 January 2030; and*
    - (b) all new farming activities to ~~comply with~~ meet the maximum cap good management practice value from 1 May 2017.”*
  - Defining 'farming activity', 'existing farming activity' and 'new farming activity' as discussed above.
89. I note the s.42A Report addresses Ravensdown's submission in paragraph 10.91 and 10.93, and in paragraph 10.100 considers it would be premature to consider what, if any, alignments between Variation 3 and

Variation 5 may be appropriate until such time as Variation 5 has progressed through the plan development process. The s.42A Report recommends Policy 15.4.5 be deleted and replaced with two new Policies 15.4.5 and 15.4.5A (incorporated in submissions from Federated Farmers and Ngai Tahu).

90. While overall I support the intent of the amended and new policy, I consider a number of refinements of the terms it uses. In particular, in relation to the new Policy 15.4.5, amend Clause a) by changing the words '*estimated nitrogen losses*' to '*nitrogen loss calculation does not...*' and delete the word '*limits*'. In my view, these amendments would make the provision more accurate and be consistent with the other policies in Variation 3.
91. In relation to Clause (b), as discussed above, Ravensdown in the first instance sought the deletion of the maximum cap approach from the plan. However, should the Commissioners decide to retain the maximum cap approach, then I recommend the following amendments: "~~allowing~~ permitting *farming activities whose ~~estimate~~ nitrogen loss calculation exceed the flexibility cap in Table 15(m) provided ~~there is no~~ it does not increase ~~in~~ above the nitrogen baseline for the farming activity, and the nitrogen baseline or the nitrogen loss calculation does not exceed the maximum cap set out in Table 15(n).*" The same applies to the new Policy 15.4.5A which also includes reference to the maximum cap.
92. In relation to Clause (c), I support this amendment with the term '*estimated nitrogen losses*' amended to read '*nitrogen loss calculation*'. The same applies to Clause (d).
93. I support the intent of including new Policy 15.4.5A as it allows for activities on extremely light soils to operate. However, I note the policy uses the term '*change of land use*' which is undefined and will remain undefined as the s.42A Report does not recommend a definition (paragraph 13.63). I do not support the use of this term in the plan without definition, and request that a definition is added that ensures a change of land use solely applies to the difference between an existing farming activity and a new farming activity as per the relief sought by Ravensdown, where a new farming activity is the '*change in land use*'. The need to define '*farming activity*' as also discussed above also applies.

**Plan Provision:** Policy 15.4.6 (Page 15-5)

94. In its submission Ravensdown supported the overall intent of Policy 15.4.6, but expressed concern that the current way it is written the policy is more like a condition on a rule rather than a clause in a policy. Ravensdown also sought the replacement of the maximum cap with GMP. Overall Ravensdown considered Policy 15.4.6 should have a similar structure to the other policies.
95. Ravensdown also considered that Policy 15.4.6 demonstrates the importance of clearly defining terms used such as ‘*existing farming activity*’ and ‘*farming activity*’ to fully understand the implications of the policy, and implementation through the rules.
96. To address these matters Ravensdown sought the intent of Policy 15.4.6 to be retained while:
- Amending Policy 15.5.6 to read as follows (or similar): “Improve water quality ~~I-in~~ the Northern Streams Area and Waihao-Wainono Area, improve water quality while:  
(a) *allowing for the continued operation of existing farming activities on extremely light soils, provided*  
(b) *the farming activity is operated in accordance with a Farm Environment Plan that sets out actions to be implemented to ensure long-term compliance with the ~~maximum cap in Table 15(n)~~ good management practice values to be determined by MGM.*”
  - Defining ‘*farming activity*’, ‘*existing farming activity*’ and ‘*new farming activity*’ as discussed above.
97. I note the s.42A Report recommends Policy 15.4.6 be deleted as a consequence of the new Policy 15.4.5 and 15.4.5A discussed above. While overall I support the deletion of this policy and the adoption of the new Policies 15.4.5 and 15.4.5A, this support is subject to addressing the concerns raised above relating to Policy 15.4.5A.
98. Should the Commissioners reject the s.42A Report recommendation and retain Policy 15.4.6, my earlier discussion on the deletion of the maximum cap approach and the need to define ‘*farming activity*’ applies.



**Plan Provision: Policy 15.4.7 (Page 15-5)**

99. While Ravensdown generally supported the intent of Policy 15.4.7 in its submission, it considered some of the policy direction is not appropriate and requires amendment. In addition, Ravensdown sought the replacement of the maximum cap with good management practice.
100. In particular, Ravensdown considered the policy should:
- Be aimed at controlling nitrogen losses, rather than managing them;
  - Condition (a) should apply to all farming activities; and
  - Condition (b) should require rather than enable activities to operate, to be consistent with other policies (e.g. Policy 15.4.9).
101. In addition, Ravensdown considered that Policy 15.4.7 should also provide for economic development similar to Policy 15.4.9 (discussed below). Making this provision would be consistent with the intention of the CWMS and ZIP Addendum for the area which seeks to balance economic development with sustainable environmental outcomes.
102. To address these matter Ravensdown sought Policy 15.4.7 to be amended to read:
- “~~Manage-Control~~ nitrogen losses from land within Northern Streams Plains, Northern Streams Hill, Waihao-Wainono Plains and Waihao-Wainono Hill while providing for economic development by:*
- (a) Requiring all farming activities operating in accordance with ~~maximum caps~~ good management practice values and relevant flexibility cap; and*
- (b) ~~enabling~~ Requiring all farming activities to operate in accordance with the greater of the nitrogen baseline or the flexibility cap relevant to the respective area.”*
103. I note the s.42A Report recommends Policy 15.4.7 be deleted as a consequence of the new Policy 15.4.5 and 15.4.5A discussed above. While overall I support the deletion of this policy and the adoption of the new Policies 15.4.5 and 15.4.5A, this support is subject to addressing the concerns raised above relating to Policy 15.4.5A.
104. Should the Commissioners reject the s.42A Report recommendation and retain Policy 15.4.7, my earlier discussion on the deletion of the maximum cap and the need to define ‘farming activity’ applies. I also consider the other

amendments proposed by Ravensdown are appropriate and necessary and improve the clarity and reading of the policy.

**Plan Provision:** Policy 15.4.9 (Page 15-6)

105. In its submission Ravensdown noted that this is the only policy that provides for economic development in Variation 3 and is consistent with the vision of the CWMS and the ZIP. Ravensdown is aware that Policy 15.4.9 applies only to the Morven-Sinclairs Area which is the only Green Zone in the variation area, and it is acknowledged that water quality outcomes are being met.
106. This would imply that economic development is not specifically provided for in the other two areas. This is contrary to the intention of the CWMS and ZIP Addendum for the area which seeks to balance economic development with sustainable environmental outcomes. Ravensdown has sought an amendment to Policy 15.4.7 above to address this matter.
107. While overall Ravensdown supported the intent of Policy 15.4.9, it considered that the policy should control nitrogen losses, rather than manage them. This amendment is consistent with Ravensdown's submission on Policy 15.4.7 above.
108. To address these matters Ravensdown sought the intent of Policy 15.4.9 be retained as it is currently written, and amend the start of the policy to read: *"~~Manage~~Control nitrogen losses within the..."*
109. I note the s.42A Report addresses Ravensdown's submission points in paragraphs 10.139 and recommends an amendment to the policy, but not to address Ravensdown's submission points. The recommended amendment deletes reference to economic development to provide instead for intensification.
110. I support the recommendation of the s.42A Report. Notwithstanding this support, I do address below in relation to comments on new Rule 15.5.2A that it seems that if a farming activity in the Morven Sinclairs area exceeds its nitrogen baseline then this activity defaults to Rule 15.5.5 as a prohibited activity. This would mean there can be no assessment of whether the Table 15(p) load limits are exceeded or not, and Policy 15.4.9 is not implemented by that rule.

**Plan Provision: Policy 15.4.10 (Page 15-6)**

111. In its submission Ravensdown generally supported the intent of Policy 15.4.10. Notwithstanding this support, Ravensdown expressed a concern that the rules do not implement this intent. Policy 15.4.10 provides for an increase in nitrogen loss above the nitrogen baseline for a farming enterprise. However, condition 3 of Rule 15.5.6 provides for a discretionary activity where the nitrogen baseline is not exceeded and a prohibited activity where it is exceeded. Ravensdown sought the rules to be amended later in its submission to be consistent with Policy 15.4.10.
112. To address this matter, Ravensdown sought Council to retain the intent of Policy 15.4.10 as it is currently written.
113. I note the s.42A Report recommends Policy 15.4.10 be retained as notified. I support this recommendation.

**Plan Provision: Policy 15.4.11 (Page 15-6)**

114. In its submission Ravensdown opposed the intention of the policy to avoid catchment nutrient load limits being exceeded. Ravensdown noted that Policy 15.4.11 is the only policy that has this directive regarding exceeding nutrient load limits. Such a directive is considered unnecessary and could lead to onerous consent requirements, or not being able to apply for consent. Ravensdown considered Policy 15.4.11 should be amended to be more enabling, consistent with the other policies.
115. In addition, Ravensdown noted that Policy 15.4.11 refers to ‘*Surface Water Allocation Zones*’ (which is a term also used in Rules 15.5.6 and 15.5.9, and footnote 1 to Table 15(g)) for guiding where a Farm Enterprises can establish and operate. Looking at Figure 14 of the s.32 Evaluation Report (page 3-3), there are at least 16 different Surface Water Allocation Zones identified. Ravensdown considers this is yet another layer of requirement that adds to an already complex nutrient management regime that is not defined. If Council intends to retain reference to these water allocation zones, a definition is required.
116. In order to address these matters, Ravensdown sought Policy 15.4.11 to be amended to read: “~~Avoid~~Ensure the catchment nutrient load limits being~~are~~”

*not exceeded by only allowing...*” and define the term ‘*Surface Water Allocation Zone*’.

117. I note the s.42A Report states in paragraph 10.239 that Ravensdown seeks to weaken the policy and the term ‘*avoid*’ is appropriate to effectively manage nutrient losses within each of the surface water allocation zones. I disagree with the s.42A Report’s suggestion that Ravensdown is intending to weaken the policy. Such a statement is in my view inappropriate. Ravensdown’s intent is always focussed on achieving the water quality outcomes agree to by the community in the ZIP Addendum which it has been involved in, and to Farm Enterprises/Nutrient User Groups (NUGs) to establish and operate. As I have discussed in Part One of my evidence, ‘*avoid*’ can lead to activities being prohibited which I consider unwarranted and unjustified.
118. I also note the s.42A Report fails to address Ravensdown’s submission regarding defining the term ‘*surface water allocation zone*’. While this term is used in the water allocation policies and rules, it is used here for nutrient allocation and a definition would ensure it is used correctly and as intended. As Ravensdown points out in its submission, there are 16 surface water allocation zones in the plan area, but only 5 nutrient zones (Waihao Hills etc.) and the question needs to be asked why would the Farming Enterprise and NUGs be any different to other properties in Variation 3? For example, the recommendation for Policy 15.4.3 refers to avoiding the sharing of allowable nitrogen losses between the hills and plains areas – there is no suggestion of avoiding nitrogen losses between surface water allocation zones.
119. Furthermore, the recommendation for Policy 15.4.10 is that it is retained as notified, which I support. This policy refers to enabling flexibility beyond the nitrogen baseline as long as the property is in a NUG, irrigation scheme or Farming Enterprise. The nitrogen baseline definition separates the 2009-13 nitrogen losses into the nutrient zones (as mentioned before) and not into the 16 surface water allocation zones. In my opinion, this suggests that membership into a Farm Enterprise or NUG should not be restricted to the same surface water allocation zone but the nutrient zone, as this is consistent with the policies and definitions. I recommend these matters be address by defining the surface water allocation zone and their purpose.

**Plan Provision: Policy 15.4.12 (Page 15-6)**

120. Similar to Policy 15.4.3 above, in its submission Ravensdown considered it is not possible to restrict the movement of nitrogen between properties. The movement of nutrients is not dependent on what a nutrient budget says or whether the farm is part of a collective as nitrogen will move down the catchment and down the soil profile. It is not clear how Council expects a resource user to restrict the movement of nitrogen between properties.
121. In addition, Policy 15.4.12 applies to Nutrient User Groups and Farming Enterprises in all 3 areas of the South Coastal Canterbury area, which does not reflect the intent of the ZIP Addendum and the policies included for managing land use to maintain or improve water quality. The policy also refers to the maximum cap which is opposed by Ravensdown.
122. To address these matters Ravensdown sought Policy 15.4.12 to be deleted.
123. I note the s.42A Report recommends the policy be clarified to state that it is intended the sharing of nitrogen between properties is restricted.
124. As I have already stated above in relation to Policy 15.4.3, in my opinion the recommended amendment is still ambiguous and confusing and the same issues raised by Ravensdown regarding a property that straddles the hills and plains area remains. As Policy 15.4.12 relates to Farm Enterprises or NUGs, it should set out to describe what those groups can do to achieve (or maintain) the water quality outcomes desired, but currently the policy focusses on the restriction of movement of nitrogen. In my opinion, Policy 15.4.12 should be enabling provided the conditions are complied with. Otherwise, in my opinion the policy should be deleted as sought by Ravensdown.

**Plan Provision: Policy 15.4.13 (Page 15-6)**

125. While in principle Ravensdown supported the concept of a Nutrient User Group being able to 'trade' nitrogen among its constitute members, it considered in its submission that the policy is poorly written and the concept being proposed is not clear. In particular Ravensdown considered the conditions in the policy have an administrative focus rather than providing direction on how such a scheme may be implemented or utilised by the NUG.

126. To address these matters Ravensdown sought an amendment to the policy to clarify the purpose of the NUG, how aspects identified are to be implemented, and how an NUG can utilise the scheme proposed.
127. I note the s.42A Report does not specifically recognise that Ravensdown sought that the policy be amended to clarify its intent and recommends Policy 15.4.13 be retained as notified.
128. While Ravensdown's request has not been acknowledged or responded to, I do not intend to pursue this submission point any further.

**Plan Provision:** Policy 15.4.14 (c) (Page 15-7)

129. In its submission Ravensdown noted that Policy 15.4.14(c) states that any property getting water from an Irrigation Scheme is not able to exceed the maximum cap. As well as opposing the adoption of the maximum cap mechanism, Ravensdown considered this is not consistent with other PCLWRP variations that allow the Irrigation Scheme to allocate the nutrient losses how they see fit on a property, so long as the scheme loads are met.
130. To address this matter Ravensdown sought Policy 15.4.14(c) to be deleted and for the provisions for irrigation schemes included in Variation 3 to be consistent with the provisions contained in Variations 1 and 2.
131. I note the s.42A Report recommends Policy 15.4.14 be retained as notified. There is no specific reference to Ravensdown's submission point in the s.42A Report.
132. In my opinion, the s.42A Report has missed an important point made by Ravensdown and that is the need for consistency across the region in regards to how nutrient management is achieved by irrigation schemes. In my experience, an irrigation scheme has management and contractual processes in place that allows the management of nitrogen losses from individual properties to achieve a scheme load. This is consistent with the stated purpose of Policy 15.4.14 included in paragraph 10.297 of the s.42A Report. I therefore do not consider Clause (c) of Policy 15.4.14 is necessary or appropriate, and can be deleted. In my opinion, there is no reason why the maximum cap, if chosen to remain in the plan by the Commissioners, cannot be exceeded as long as the nitrogen load limits or the schemes nitrogen load allocation are complied with.

**Plan Provision: Rule 15.5.1 (Page 15-10)**

133. In its submission Ravensdown supported the intent and permitted activity status of Rule 15.5.1.
134. Ravensdown sought the intent and permitted activity status of Rule 15.5.1 to be retained.
135. I note the s.42A Report recommends Rule 15.5.1 be retained as notified. I support this recommendation.

**Plan Provision: Rule 15.5.2 (Page 15-10)**

136. In its submission Ravensdown supported the permitted activity status of Rule 15.5.2 if the nitrogen loss calculation does not exceed the nitrogen baseline, as this is in general accordance with the nutrient management framework in the PCLWRP, and Variation 1 and Variation 2. This concept is supported as the comparison is between historical nitrogen losses and current nitrogen losses and, by proxy, actual effects on the environment, and is based on the actual land uses during those periods that are currently well defined in the provisions.
137. However, Ravensdown expressed the following concerns regarding the mechanisms adopted in the rule, and how these mechanisms are applied:
  - Rule 15.5.2 (and the subsequent rules) includes many terms and concepts that are complex and make it difficult to determine whether an activity is permitted - the complexity in this rule is brought about by the exceptions, flexibility cap, nitrogen baseline, nitrogen loss limits, location, and reference to 'land' in one instance and 'property' in another;
  - In terms of the introduction of the flexibility cap, it is not clear what impact this mechanism has on a resource user - on one hand it may benefit the farmer as the value could be higher than the nitrogen baseline;
  - The nutrient management framework in Variation 3 provides for no flexibility and only enables the status quo;
  - There is no justification of the 10 kg N/kg/yr and 15 kg N/ha/yr in the Waihao-Wainono Plains and Northern Streams Plains areas respectively as the flexibility cap;

- The application of the flexibility cap is inconsistent;
  - Rule 15.5.2 does not have any reference to meeting MGM at any date, even though the ZIP Addendum and s.32 Evaluation Report mentions the need to adopt GMP values from the MGM Project after 2015 - the maximum cap is meant to act as a proxy for the farms MGM value until those values are available, and seek its deletion from Variation 3.
138. Overall, as a result of this uncertainty and the complexity it brings, Ravensdown considered it would be better to adopt a similar approach as Variations 1 and 2 which relies on the nitrogen baseline and GMP.
139. To address these matters Ravensdown sought the permitted activity status of Rule 15.5.2 to be retained, with the following amendments:
- Review the flexibility cap so that it achieves the intent of providing flexibility, particularly in the Hill Areas;
  - If the flexibility cap is retained, review Rule 15.5.2 to ensure it is implemented consistently to reflect the red, orange, green zoning of the PCLWRP;
  - Delete the reference to the maximum cap in Rule 15.5.2 and include reference to the not exceeding the nitrogen baseline and adoption of MGM values and the meeting of nitrogen loss rates under good management practices within a specified time frame;
  - Define '*farming activity*', '*existing farming activity*' and '*new farming activity*' as discussed above.
140. I note the s.42A Report recognises Ravensdown submission point regarding the complexity of the rule (paragraph 10.166), but I am unable to find any record of the other submission points Ravensdown raised being considered. The s.42A Report recommends the permitted activity status be retained, and makes a number of recommended amendments to the rule. A new rule is also recommended (Rule 15.5.2A) which is for farming in the Morven-Sinclairs area, which was originally condition 2 of Rule 15.5.2.
141. I support a number of the recommendations including:
- Retaining the Permitted Activity status of the rule, and the recommended Rule 15.5.2A;



- The deletion of Condition 2 from Rule 15.5.2 and the amendments to Condition 5.
142. In relation to reviewing the flexibility cap so that it achieves the intent of providing flexibility, particularly in the Hill areas, this matter remains unresolved. In my opinion, there is a lack of flexibility in the Hill areas with the 5kg N flexibility cap imposed. This lack of flexibility is not consistent with the water quality outcomes agreed to in the ZIP Addendum. In my view the flexibility cap it is not based on actual land uses (as the nitrogen baseline is) and seems to be a ‘blanket’ approach to deriving a nitrogen loss figure a farm can leach up to. This raises questions about its appropriateness, accuracy and need of this provision. I recommend a review is undertaken and the flexibility provided as intended. Similar comments apply to reviewing Rule 15.5.2 to ensure it is implemented consistently to reflect the red, orange, green zoning of the PCLWRP.
143. My earlier comments regarding deleting the maximum cap also apply.
144. Similarly, my comments above regarding ‘*farming activity*’ apply.
145. In relation to the new Rule 15.5.2A recommended specifically for the Morven-Sinclair area, while I support the intent of this new rule, in my view it does not give effect to Policy 15.4.9. The reason for this is because the policy provides for farming activities to increase above their nitrogen baseline as long as the nitrogen load limit in Table 15(p) is not exceeded, and this will be considered as part of a consent process. The new Rule 15.5.2A establishes that it is a permitted activity if the nitrogen baseline is not exceeded and GMP in Schedule 24b is implemented, which I support. However, Rule 15.5.5 (as amended) states that a farming activity that does not meet condition 1 of Rule 15.5.2A (not exceeding the baseline) is a prohibited activity. In my view this is contrary to the intent of Policy 15.4.9 and needs reviewing. This is consistent with my earlier comments above regarding the use of prohibited activity status. Furthermore, in my opinion non-compliance with a condition of Rule 15.5.2 should require discretionary activity consent (not just condition 1 a) or 1 c) as provided for in the new Rule 15.5.4A), as the intent of Policy 15.4.9 is to enable such activities.

**Plan Provision: Rule 15.5.3 (Page 15-11)**

146. In its submission Ravensdown supported the restricted discretionary activity status provided for in Rule 15.5.3. Notwithstanding this support, Ravensdown made the following submission points:

- There is a typo in the fourth line of the rule where 15.4.2 should read 15.5.2;
- A matter of discretion that should be available to council is if the farming activity meets MGM values - this would be consistent with the ZIP Addendum and s.32 Evaluation Report which identifies compliance with the MGM values as a key nutrient management approach;
- The first matter of discretion of Rule 15.5.3, which states that discretion is restricted to seeing whether the nitrogen loss from the farm will result in the flexibility cap being exceeded, is confusing - this is because a reason why restricted discretionary activity consent might be required is if the flexibility cap is exceeded in the permitted activity condition (Rule 15.5.2 1(b), if the flexibility cap is higher than the nitrogen baseline);
- The sixth matter of discretion relates to the quality and appropriateness of any soil mapping for the property - it is not clear what this matter of discretion intends to address and it is assumed the soil mapping will inform the nutrient budget. However, Canterbury is mapped using S-Map which is what is used in an Overseer nutrient budget, and is the first option in the best practice inputs standards. This matter of discretion is therefore redundant.

147. To address these matters Ravensdown sought the restricted discretionary activity status provided for in Rule 15.5.3 to be retained, and the rule amended as follows:

- Correct the reference in the fourth line; amend Rule 15.4.2 to read 15.5.2;
- Include a new matter of discretion which would require the farming activity to comply with MGM values by a specified timeframe;
- Delete the first matter of discretion in Rule 15.5.3;

- Amend the fifth matter of discretion to read: *“The appropriateness of the actions and time frames described in the Farm Environment Plan in achieving the nitrogen baseline; the flexibility cap loss rates in Table 15(m); or the ~~maximum cap loss rates~~ good management practice values in Table 15(n)(to be included at a later date) (whichever is relevant); and”*
- Delete the sixth matter of discretion.

148. I note the s.42A Report retains the restricted discretionary activity status of Rule 15.5.3, and acknowledges Ravensdown’s submission points and makes some amendments. I support the retaining of the restricted activity status of the rule.
149. In relation to the request by Ravensdown for a new matter of discretion to be added which would require the farming activity to comply with MGM values by a specified timeframe, the s.42A Report rejects this request as it is not recommended that any amendments are made to incorporate the MGM project with Variation 3. I have discussed this matter above in conjunction with deleting reference to the maximum cap approach and I disagree with the views expressed to reject the request. In my opinion, the addition of a new matter of discretion is necessary and appropriate to implement the water quality outcomes sought by the ZIP Addendum and is consistent with the s.32 Evaluation Report which identifies compliance with the MGM values as a key nutrient management approach.
150. In relation to the deletion of the first matter of discretion, in my opinion this matter of discretion is not necessary. The reason for this is that reference to the flexibility cap being exceeded is not necessary as Rule 15.5.2 allows this to occur if the baseline is higher, and reference to the total catchment load limits in Table 15(p) is also not necessary if the farming activity has not complied with Rule 15.5.2. For these reasons the matter of discretion 1 can be deleted.
151. In relation to the amendments recommended to matter of discretion 5, I accept this recommendation subject to the deletion of the reference to the maximum cap for reasons already discussed above.

152. Having assessed the s.42A Report and recommendation to amend matter of discretion 6, I remain neutral on this matter.
153. Furthermore, in my opinion non-compliance with condition (1) of the new Rule 15.5.2A should require restricted discretionary activity consent (and not discretionary as recommended in the new Rule 15.5.4A), as the intent of Policy 15.4.9 is to enable such activities. It would be appropriate, in my opinion, for Rule 15.5.3 to be amended to include non-compliance with condition (1) of the new Rule 15.5.2A as a restricted discretionary activity as the matters of discretionary are appropriately identified.

**Plan Provision:** Rule 15.5.4 (Page 15-11)

154. In its submission Ravensdown considered Rule 15.5.4 should require a discretionary activity consent if Condition 1 of Rule 15.5.3 is not met. While Ravensdown accepted that not submitting a FEP with a resource consent application is undesirable and consent is required, a full discretionary consent provides the Council with the opportunity to consider the proposed activity under s.104 of the RMA and decline the application if it does not meet the objectives and policies of the plan.
155. To address this matter Ravensdown sought Rule 15.5.4 to be amended to be a discretionary activity.
156. In note the s.42A Report has recommended to retain Rule 15.5.4 as notified, with a minor grammatical correction. Essentially the s.42A Report rejects Ravensdown's request to amend the status to discretionary, and provides no reason for retaining the non-complying status. The s.42A Report also recommends a new Rule 15.5.4A be included in the plan that provides for a farming activity (apart from a NUG or farming enterprise or irrigation scheme) as a discretionary activity where it does not meet either condition 1(a) or 1(c) of Rule 15.5.2 or condition 1 of Rule 15.5.2A.
157. In my opinion, the request by Ravensdown for discretionary activity status where an activity cannot comply with condition 1 of Rule 15.5.4 is reasonable and consistent with the intentions of the ZIP Addendum. Non-complying activity status requires an additional layer of assessment (s.104D) that adds

additional costs and time to the resource user when preparing an application, and the environmental benefits would not warrant such and onerous process.

158. I note the s.42A Report recommends a new Rule 15.5.4A which does not seem to be directly related to Rule 15.5.4. Notwithstanding this, I also note that the new rule provides for a farming activity that does not meet condition (1) of the new Rule 15.5.2A as a discretionary activity. While I have discussed above my preference for such an activity to be restricted discretionary under Rule 15.5.3 and the reasons why, I find this rule conflicts with Rule 15.5.5 which makes a farming activity that does not comply with condition (1) of Rule 15.5.2A a prohibited activity. Should the Commissioners not accept my recommendation that non-compliance with condition (1) of Rule 15.5.2A is restricted discretionary, my preference would be for the activity to be discretionary. As I have discussed in Part One of my evidence, I do not support prohibited activity status for farming activities that cannot comply with conditions of a permitted activity for the reasons already discussed.
159. In addition to the above, I also consider condition 4 of the new rule is unnecessary and inappropriate. As Council already has clear guidance and instructions regarding the preparation and delivery of FEP's and nutrient budgets, in my opinion there is no need to use an accredited FEP auditor to review or prepare a FEP prior to the consent application being submitted - this assessment is the job of the Consents Team at Council once the consent application is submitted. The FEP Auditor already has a clear brief under the PCLWRP which does not include a legal requirement to prepare or review FEPs prior to being submitted as part of a consent application.
160. Notwithstanding the above points, I recommend the proposed new Rule 15.5.4A be adopted subject to addressing the concerns I have raised above.

**Plan Provision:** Rule 15.5.5 (Page 15-11)

161. In its submission Ravensdown considered Rule 15.5.5 should require non-complying activity consent if the activity does not meet one or more of conditions 1(a), 1(c) or 4 of Rule 15.5.2. Ravensdown did not consider prohibited activity status is justified in implementing the objectives of the PCLWRP, or policies of Variation 3, or the directions of the CWMS and ZIP

Addendum. The way the rules are currently written a minor increase in nitrogen loss that may have no or little environmental effects can move an activity from permitted to prohibited activity which it opposed.

162. Ravensdown considered non-complying activity status is appropriate as any application has to demonstrate whether the environmental effects will be minor and the activity is consistent with the objectives and policies of the (relevant) plan, before it can be assessed under s.104 of the RMA. This provides an opportunity to fully assess the implications of the proposed activity, and decline consent if the application does not meet the thresholds set.
163. To address this matter Ravensdown sought Rule 15.5.5 to be amended to be a non-complying activity.
164. I note the s.42A Report recommends the consent status be retain as notified, but has recommended an amended to the rule to refer to non-compliance with new proposed rules 15.5.2A and 15.5.4A.
165. The comments I make in Part One regarding prohibited activity status, and the s.42A Report response apply. Just to reiterate, I find it confusing that in paragraphs 10.206 to 10.209 of the s.42A Report the submissions against the prohibited activity status are assessed and states that prohibited activity is not appropriate in all circumstances and there are recommendations that suggests discretionary activity status is appropriate and will be adopted.
166. Notwithstanding the above, I note there is now an exclusion for those properties who have ‘lawfully’ exceeded their nitrogen baselines (Rule 15.5.4A). Why this exclusion has not been allowed for farms in the Morven-Sinclairs area is unclear to me. In addition, as I have discussed above, I do not consider condition 4 of Rule 15.5.4A is necessary or required. I am therefore concerned that non-compliance with this condition is a prohibited activity.
167. I therefore recommend that Rule 15.5.5 is amended to be a non-complying activity. Should the Commissioners decide to retain the prohibited activity status, I recommend the exclusion for those properties who have ‘lawfully’ exceeded their nitrogen baselines (Rule 15.5.4A) be extended to farming activities in the Morven-Sinclairs area, and that reference to condition 4 of Rule 15.5.4A be deleted from the rule.

**Plan Provision:** Rule 15.5.6 (Page 15-11)

168. In its submission Ravensdown considered the use of land for a farming activity as part of a farming enterprise should be a restricted discretionary activity, with Council restricting its discretion to the conditions included in Rule 15.5.6.
169. Furthermore, Ravensdown considers Rule 15.5.6 is not consistent with the policies for Farming Enterprises (including Policies 15.4.10, 15.4.11, 15.4.12) for the following reasons:
- Condition 3 stipulates that the nitrogen loss calculation for a Farm Enterprise cannot exceed the respective nitrogen baseline for each land area that forms part of the Farm Enterprise – as discussed above, a new definition of nitrogen loss calculation is required so that a nitrogen loss calculation is for the same area as a nitrogen baseline;
  - Condition 4 uses the term ‘*Surface Water Allocation Zone*’ which is a term also used in Policy 15.4.11 for guiding where a Farm Enterprises can establish and operate - condition 4 of this rule is not required and can be deleted;
  - Policy 15.4.10 implies that a farm that is part of a Farm Enterprise and is not in the Northern Streams Hill or Waihao-Wainono Hill Areas (i.e. is in the Morven-Sinclairs Area, or the Northern Streams and Waihao-Wainono Plains Areas) can increase their nitrogen loss beyond the nitrogen baseline - however, Rule 15.5.6 (3) states that a farming activity is discretionary if it does not exceed the nitrogen baseline (in any area), and is a prohibited activity if the activity exceeds the nitrogen baseline;
170. To address these matters Ravensdown sought Rule 15.5.6 to be amended as follows:
- Amend to be a restricted discretionary activity, with the matters of discretion those matters already listed;
  - Amend the intent of Rule 15.5.6 to be in accordance with Policies 15.4.10 to 15.4.12, in that flexibility in nutrient management is enabled if a farm is part of a Farming Enterprise where nitrogen losses can

exceed their nitrogen baselines subject to a resource consent application and FEP;

- Delete Condition 4;
- Review the complexity of the rule regime in light of the ZIP request for a simple framework.

171. I note the s.42A Report retains Rule 15.5.6 as notified, apart from a minor amendment to condition 3, replacing the word '*respective*' with the word '*cumulative*', regarding the exceedance of the nitrogen baseline. Apart from recognition that submitters sought restricted discretionary activity status for Rule 15.5.6, the s.42A Report fails to consider the other amendments requested by Ravensdown.

172. As there is no discussion regarding why restricted discretionary activity status is not accepted, it is difficult to provide comment. As I have previously discussed, in my opinion the intent of the ZIP Addendum and Policies 15.4.10 – 15.4.12 are enabling and Policy 15.4.10 in particular for Farming Enterprises states that flexibility is enabled by allowing an increase above the nitrogen baseline. In my opinion this justifies restricted discretionary activity status for farming activities as part of a farming enterprise. I also consider the conditions included in Rule 15.5.6 can be adapted as matters of discretion for considering consents.

173. I have discussed the '*surface water allocation zone*' above in paragraphs 116 – 119 above. Based on these points I recommend condition 4 be deleted from Rule 15.5.6, or alternatively amend to replace the term '*surface water allocation zone*' with the term '*the same Nutrient Zone*'.

174. Similarly, I have discussed the complexity of the rule regime and the need to review the provisions in order to achieve the water quality outcomes intended by the ZIP Addendum above, and the same comments apply.

**Plan Provision:** Rule 15.5.7 (Page 15-11)

175. In its submission Ravensdown considered Rule 15.5.7 should require a discretionary activity consent if condition (1) of Rule 15.5.6 is not met. While Ravensdown accepted that not submitting a FEP with a resource consent application is undesirable if consent is required, a full discretionary consent



provides the Council with the opportunity to consider the proposed activity under s.104 of the RMA and decline the application if it does not meet the objectives and policies of the plan.

176. In order to address this matter Ravensdown sought Rule 15.5.7 to be amended to a discretionary activity.
177. I note the s.42A Report recommends Rule 15.5.7 be retained as notified.
178. I have already discussed above the reasons why I consider Rule 15.5.6 should be a restricted discretionary activity, and it follows on that non-compliance with condition 1 of Rule 15.5.7 should be a discretionary activity. In my opinion for consistency non-compliance with condition (3) should also be a discretionary activity.
179. I therefore recommend Rule 15.5.7 be amended to read: *“The use of land for a farming activity as part of a Farming Enterprise that does not complying with condition 1 and 3 of Rule 15.5.6 is a ~~non-complying~~ discretionary activity”*.

**Plan Provision:** Rule 15.5.8 (Page 15-11)

180. In its submission Ravensdown considered Rule 15.5.8 should require non-complying activity consent if the activity does not meet one or more of conditions 2, 3 or 4 of Rule 15.5.6. Ravensdown did not consider prohibited activity status is justified in implementing the objectives of the PCLWRP, or policies of Variation 3, or the directions of the CWMS and ZIP.
181. Ravensdown considered non-complying activity status is appropriate as any application has to demonstrate whether the environmental effects will be minor, and the activity is consistent with the objectives and policies of the (relevant) plan, before it can be assessed under s.104 of the RMA. This provides an opportunity to fully assess the implications of the proposed activity, and decline consent if the application does not meet the thresholds set.
182. In order to address these matters Ravensdown sought for Rule 15.5.8 to be amended to be a non-complying activity.
183. I note the s.42A Report recommends Rule 15.5.8 be retained as notified. I have discussed the reasons included in the s.42A Report above in my

evidence. In particular the s.42A Report states that it is important to retain the prohibited activity status to protect the integrity of the consent process for an application for the use of land that forms part of a Farming Enterprise.

184. I have discussed above in Part One of my evidence, and in relation to Rule 15.5.5, why I consider prohibited activity is not appropriate and the same reasons apply. In my opinion, either exceeding the maximum cap (or MGM value) or a nitrogen loss calculation not exceeding the nitrogen baseline or having properties not in the same Nutrient Zone does not warrant a farmer not being given the opportunity to demonstrate through a resource consent (with very high tests) why the farming activity should be allowed. Furthermore, I note in paragraph 10.269 (a) of the s.42A Report that the purpose of prohibited activity status is to ensure that the nitrogen loss allowance does not exceed the plan limits. In my opinion, there are issues around the nitrogen loss limits (potential errors etc.) which means there should be an opportunity for a resource user to apply for consent and for the effects of that activity to be fully assessed by the consent authority.
185. As I have discussed above, I consider this is contrary to the Vision of the CWMS, the intent of the ZIP Addendum and contrary to the essentially enabling policies of the plan for Farm Enterprises (including Policy 15.4.10). Similar to my comments on Rule 15.5.5 above, Policy 15.4.10 intends that flexibility is enabled by allowing an increase above the nitrogen baseline whereas Rule 15.5.8 states that exceeding the nitrogen baseline is a prohibited activity.
186. I therefore recommend Rule 15.5.8 be amended to be a non-complying activity where a farming activity as part of a Farming Enterprise does not meet conditions 2 and 4 (if retained with the word change requested above) of Rule 15.5.6.

**Plan Provision:** Rule 15.5.9 (Page 15-12)

187. In its submission Ravensdown accepted that the Nutrient User Group is a new concept and it is considered appropriate for the use of land for a farming activity as part of a farming enterprise to be a discretionary activity.

188. Ravensdown sought for the intent and discretionary activity status of Rule 15.5.9 to be retained.
189. The s.42A Report recommends Rule 15.5.9 be retained as notified
190. I support this recommendation.

**Plan Provision:** Rule 15.5.10 (Page 15-12)

191. In its submission Ravensdown considered Rule 15.5.10 should require non-complying activity consent if the activity does not meet one or more of conditions of Rule 15.5.9. Ravensdown does not consider prohibited activity status is justified in implementing the objectives of the PCLWRP, or policies of Variation 3, or the directions of the CWMS and ZIP Addendum.
192. Ravensdown considered non-complying activity status is appropriate as any application has to demonstrate whether the environmental effects will be minor, and the activity is consistent with the objectives and policies of the (relevant) plan (s.104D), before it can be assessed under s.104 of the RMA. This provides an opportunity to fully assess the implications of the proposed activity, and decline consent if the application does not meet the thresholds set.
193. To address this matter Ravensdown sought for Rule 15.5.10 to be amended to be a non-complying activity.
194. I note the s.42A Report recommends Rule 15.5.10 be retained as notified for the reasons already discussed above.
195. I have discussed above in Part One of my evidence and in relation to Rules 15.5.5 and 15.5.8 why I consider prohibited activity status is not appropriate or necessary, and the same comments apply. I agree with Ravensdown's submission points and request that Rule 15.5.10 be a non-complying activity. One further comment I have is that the conditions included in Rule 15.5.9 are essentially of an administrative nature and none of the conditions relate to exceeding the nitrogen baseline or flexibility cap that have effects on water quality outcomes. I therefore do not believe non-compliance with these types of conditions have environmental effects that warrant a prohibited activity status.

196. I recommend Rule 15.5.10 be amended to be a non-complying activity as requested by Ravensdown.

**Plan Provision:** Rule 15.5.11 (Page 15.11)

197. In its submission Ravensdown expressed a number of concerns regarding Rule 15.5.11, including:

- That any individual farm that is part of an Irrigation Scheme will still require knowledge of their nitrogen baseline. In particular, the asterisk at the bottom of Table 15(p) says that while 1105 T of N/yr is allocated to the Waihao-Wainono catchment, there is a further 178 T available above the farms nitrogen baseline, and that scheme members are not permitted to increase above the property nitrogen baseline before accessing scheme load;
- There is a lack of consistency between Variations 1 and 2 and the provisions of Variation 3. In particular, Rule 15.5.11 states that if a farm is part of an Irrigation Scheme, discretionary consent is required operate. Ravensdown understands that in Variation 1 and 2 to the PCLWRP, this is a permitted activity as the scheme was allocated a nitrogen load to distribute as they see fit. There is no apparent reason for this inconsistency between variations.

198. To address these matters Ravensdown sought a review of the intent and need for Rule 15.5.11, and the adoption of a consistent approach with Variation 1 and 2 by either making the activity permitted, or deleting the rule.

199. I note the s.42A Report recommends Rule 15.5.11 be retained as notified. The s.42A Report acknowledges Ravensdown's request to have the activity provided for as a permitted activity, but states in paragraph 10.308 that the effects and risks associated with managing nutrient losses across an irrigation scheme are beyond that considered appropriate for a permitted activity.

200. I consider there may have been some misunderstanding regarding what Ravensdown was requesting, as the s.42A Report recommend the relief sought by Hunter Downs (in new rule 15.5.12A) which is basically what Ravensdown were seeking, albeit with the extra specific condition that the irrigation consent

has to have nitrogen loss conditions. I support the new Rule 15.5.12A as it addresses the matters raised by Ravensdown.

**Plan Provision:** Rules 15.5.13 (Page 15.12)

201. In its submission Ravensdown supported the permitted activity status for the activities listed.
202. Ravensdown sought the permitted activity status of the activities listed in Rule 15.5.13 to be retained.
203. I note the s.42A Report recommends Rule 15.5.13 be retained as notified.
204. I support this recommendation.

**Plan Provision:** Rule 15.5.14 (Page 15-13)

205. In its submission Ravensdown considered Rule 15.5.14 should require a discretionary activity consent if condition 1 of Rule 15.5.13 is not met. Ravensdown considered a full discretionary consent provides the Council with the opportunity to consider the proposed activity under s.104 of the RMA and decline the application if it does not meet the objectives and policies of the plan.
206. Ravensdown sought to amend Rule 15.5.14 to be a discretionary activity.
207. I note the s.42A Report recommends Rule 15.5.14 be retained as notified.
208. Ravensdown's request is similar to Rule 15.5.4 above, and the same comments made there apply along with Ravensdown's submission points. I recommend that Rule 15.5.14 be amended to adopt discretionary activity status.

**Plan Provision:** Tables 15(m); (n); (p) (Pages 15-32; 15-33)

209. In relation to Table 15(m), Ravensdown expressed in its submission that it cannot see a clear description of how the flexibility cap limits have derived the justification for the flexibility cap figures for the Plains Areas. Ravensdown assisted Council planner Mr Leo Fietje prepare estimates for the Hill area losses through Overseer, as included in Appendix 5 to the plan. The nitrogen losses estimates Mr Fietje comes up with are that the Kakahu, Hurunui and Class 7 soils in the Hill Areas range from 4.3 kg N/ha/yr to 9.2 kg N/ha/yr depending on rainfall (the cropping areas on the Hills Area lost between 36 –

64 kg N/ha/yr). Ravensdown cannot therefore understand how the flexibility cap is set at 5 kg N/ha/yr. While Ravensdown accepted the rules are staged so that a resource user can choose the higher of the nitrogen baseline or the flexibility cap, if the flexibility cap and nitrogen baseline are similar or the same, a prohibited activity status results.

210. In addition, Ravensdown considered that there seems to be no justification for a limit of 10 kg N/ha/yr in the Waihao-Wainono Plains Area or the 15 kg N/ha/yr in the Northern Streams Plains area.
211. In relation to Table 15(n), Ravensdown considered the maximum cap mechanism should be deleted and replaced with MGM numbers when available. Ravensdown considered Table 15(n) should be deleted with the table number held as a place setter for MGM numbers when they are available.
212. In relation to Table 15(p), Ravensdown considered that the catchments/stream that need to achieve a zero or 1 T N/yr load limit should be deleted from this table, as this will trigger the prohibited activity status. Furthermore, Ravensdown questioned how Council will monitor the nitrogen load in each of the areas/catchments in Table 15(p).
213. Ravensdown also noted in relation to the tables and nitrogen loss figures that the modellers state that: *“the methods used to generate the target loads should be reapplied when there is a new release of Overseer to ensure that the derived target load and consequent nutrient discharge allowance are compatible with the farm-scale nutrient budgets that land managers might be required to produce for compliance purposes.”*<sup>8</sup>. Ravensdown considered this matter needs to be included as a footnote to the tables.
214. To address these matters Ravensdown sought the tables to be amended as follows:
  - In relation to Table 15(m), Ravensdown supported in part the table and retaining the flexibility cap, but sought a reassessment of the numbers included in Variation 3 to ensure they actually allow for some flexibility, particularly in the Hill Areas;

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<sup>8</sup> SCCS limit setting process: estimating nitrogen loss under rural land use and informing nitrogen allocation options – Landcare Research Feb 2015

- In relation to Table 15(n), Ravensdown sought to delete the ‘*maximum cap*’ numbers and retain the table as a place setter for MGM numbers when available;
- In relation to Table 15(p), Ravensdown sought the deletion of the catchments/stream that need to achieve a zero or 1 T N/yr load limit; provide clarity regarding how Council will monitor the nitrogen load in each of the areas/catchments; and specified how the load limit will be measured, frequency, from where, and how results will be notified to ensure that farms in catchment know what the load status is;
- Add a footnote to the tables that states: “*the methods used to generate the target loads should be reapplied when there is a new release of Overseer to ensure that the derived target load and consequent nutrient discharge allowance are compatible with the farm-scale nutrient budgets that land managers might be required to produce for compliance purposes.*”

215. In relation to Table 15(m), I note the s.42A Report recommends the recalculation of Table using the most recent version OVERSEER 6.2 (and a footnote recognising this), but no amendment to the flexibility caps is recommended as according to the s.42A Report the remodelled numbers are not significantly different. Some timeframes have also been amended from 2030 to 2025. I support the recognition that the flexibility cap numbers required remodelling, and the note that indicated the most recent version of OVERSEER has been used.
216. Notwithstanding this, in my opinion the main concern raised by Ravensdown in its submission, being the lack of flexibility in the Hill areas, has not been addressed. This matter has been addressed in detail in Ravensdown’s submission, based on it assisting the Council planner undertake the earlier work for the plan. Essentially the 5kg N/ha/yr flexibility cap is low and it is more likely that a farm operating in the Hill areas will have a higher nitrogen baseline than the flexibility cap number meaning no flexibility is provided as intended in the ZIP Addendum and s.32 Evaluation Report.
217. To address this matter my preference would be for the plan to adopt for the Hill area a similar approach as taken in Variation 1 where a farming activity is

permitted if the property is less than 10ha and losses are less than 15kg N/ha/yr, or similar. Such a value could follow the structure from Table 15(m), i.e. increase from 10 to 15 to 17 dependent on augmentation. I recommend consideration be given to this approach.

218. Regarding Ravensdown's relief to have a footnote added to the tables, paragraph 10.386 of the s.42A Report states that this request appears to be a sensible solution, but I note the concerns raised by Ravensdown in its submission are not discussed, and no footnote is recommend. In my opinion, such a footnote is necessary particularly as fixed nitrogen limits are being used. This matter would be addressed by adopting the MGM approach as only the current version of OVERSEER can be used in the 'portal' which would get away from the fixed limits. I recommend the footnote be added to the tables as sought by Ravensdown.
219. Lastly, I wish to make one technical point that needs to be address, presumably as a minor amendment to a plan that the RMA allows for a council to undertake. In Table 15(m) and Table 15(n), the measurement for the Flexibility cap and Maximum cap is incorrectly referred to as *kg N/ha/yr*. This measurement is *kg N/ha/yr* and I recommend this amendment be made to ensure the accuracy of the plan.
220. In relation to Table 15(n), I note the s.42A report recommends remodelling the maximum cap nitrogen loss rates using OVERSEER 6.2 (and a footnote recognising this), and an amendment for the maximum cap poorly drained soils from 20 to 35 kg N/ha/yr.
221. The reasons for deleting the maximum cap have been discussed above, as well as the need to retain the table as a place setter for MGM numbers when available. For example, there are impracticalities of area vs soil nitrogen limits (flexibility cap and maximum cap) in terms of preparing a nutrient budget, and the s.42A Report seems to ignore these impracticalities. This will mean more work for the nutrient budget practitioners as the maximum cap values do not directly relate to the flexibility cap values (as discussed above, one is areas-based and the other is soils-based).
222. Secondly, to be consistent with the PCLWRP and Variations 1 and 2, and to be in line with the ZIP Addendum, in my opinion there needs to be provision



that identifies a plan change mechanism to include the MGM as intended by the MGM project.

223. Furthermore, it is important to note that ‘*extremely light, light, medium and poorly drained*’ are not strictly soil ‘types’ but are intended to describe soil texture – except for ‘poorly drained’ which is a physical description of a soils physical limitation. On their own each component has an influence on drainage and hence nitrogen losses; poor drainage has an influence on the amount of nitrogen that is denitrified, which is lost as gaseous emissions, and this consequently reduces the nitrogen available for leaching loss. When comparing current nitrogen losses against the maximum cap, this illustrates another impracticality that may not have been considered.
224. My comment above on Table 15(m) regarding use the correct measurement ‘*kg N/ha/yr*’ applies.
225. In relation to Table 15(p), I note the s.42A Report states that Ravensdown sought clarification of the meaning and legality of the footnote (paragraph 10.418), although its relief does not request this. Essentially the s.42A Report recommends an addition footnote clarifying how the nitrogen load limits were determined, and does not recommend any amendments as requested by Ravensdown in its submission.
226. In also note in paragraph 10.422 of the s.42A Report supports the rejection of Ravensdown’s relief because the limits that specify either 0 or 1T “... *indicate that there is to be little or no increase in N losses within those areas*”. I accept this would be the case Table 15(p) was for nitrogen losses above a nitrogen baseline or background load, but it is a limit that cannot be exceeded. Therefore a limit of 0 means I presume, that a farm cannot increase its nitrogen losses at all? This is only likely if there is no farming in that catchment, and regardless of the land use in that catchment, I would expect there would be some background nitrogen losses.
227. The comment from the s.42A Report (paragraph 10.422) that it is important to retain the limits with 0 or 1 T load limits as ‘*there is to be no or little increase in N losses*’. In my view this statement does not make sense as it is not indicating the nitrogen load is above a threshold, it is simply a limit, and it means that there can be either zero or 1 t/yr N losses in those particular

catchments. Using this reason does not seem to justify why Ravensdown's request to delete these limits has not been accepted.

228. In addition, there is reference to these catchments listed in the load limit column of Table 15(p). As these zones are not defined or shown on the planning maps, it is confusing what these might be and how they may affect a resource user. I recommend these catchments be deleted as requested by Ravensdown.
229. I also note the s.42A report recommends a new policy that reads (paragraph 10.42):
230. *“Avoid the exceedance of N load limits in Table 15(p), taking into account version changes to OVERSEER<sup>®</sup> by:*
- a. using the same input data used to generate the load limits in Table 15(p); and*
  - b. demonstrating that any additional input parameters required by the updated version of OVERSEER<sup>®</sup> reflect good management practice or better.”*
231. I am not convinced this is a policy and whether it is required. I would have thought it addresses the matters that would fit more comfortably as a footnote to the Table 15(p). In my opinion, it is poorly written, and while it does describe a course of action while is logical and common sense, it really adds little or no value or benefit to the plan. I recommend this matter be addressed as a footnote to Table 15(p).

**Plan Provision:** Schedule 24b – Farm Practices (Page 3-1)

232. In its submission, Ravensdown expressed concern that a nutrient budget is required to be prepared and reviewed annually. Ravensdown has previously raised this issue with Variations 1 and 2 to the PCLWRP, and the recent s.42A Report relating to Variation 2 has accepted its concerns, and has recommended a set of words to give a clear direction to the preparation and review of nutrient budgets in Schedule 24a Farm Practices<sup>9</sup>. Ravensdown supported the wording proposed in the Variation 2 s.42A Report.

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<sup>9</sup> Variation 2 to the proposed Land and Water Regional Plan; Section 42A Report; 23 April 2015; Paragraph 9.416; Page 118

233. To address this matter Ravensdown sought for Council to amend Schedule 24b – Farm Practices as follows:

*“(a) Nutrient Management:*

*(i) A nutrient budget based on soil nutrient tests has been prepared, using OVERSEER in accordance with the latest version of the OVERSEER Best Practice Data Input Standards [2013], or an equivalent model approved by the Chief Executive of Canterbury Regional Council, and is reviewed annually.*

*(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.*

*(ii) Fertiliser is applied in accordance with the Code of Practice for Nutrient Management [2007].*

*(iii) Records of soil tests, nutrient budgets and fertiliser applications are kept and provided to the Canterbury Regional Council upon request.”*

234. I note the s.42A Report recommends in paragraph 10.438 that Schedule 24b be amended as requested by Ravensdown, making it consistent with the earlier decision on Variation 2.

235. I support this recommendation. Notwithstanding this support, I do question how the requirement for a nitrogen loss calculation<sup>10</sup> and the Schedule 24b requirement for a nutrient budget once every three years fit together? For

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<sup>10</sup> 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.”

example, Rules 15.5.2 (permitted activities) requires both a nitrogen loss calculation (4 year rolling average, so four nutrient budgets) and to implement the Schedule 24b 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

25 September 2015

Attachment 1 - MGM Information Sheet and extract from ECan's website

# Appendix 1 - Ravensdown planning evidence for Plan Change 3 to the CLWRP

## 1. Excerpt from the MGM Information Sheet dated July 2015

### What is the MGM project?

The Matrix of Good Management (MGM) is a collaborative project designed to establish industry-agreed GMPs and to estimate expected nitrogen and phosphorus losses across a range of farming systems, soils and climates operating at GMP across the Canterbury region.

### Why do we need this?

Regional authorities across New Zealand are charged with maintaining or improving freshwater quality and setting quantitative limits to achieve this under the National Policy Statement for Freshwater Management (2014).

The Land and Water Forum (Anon., 2012) emphasised the use of agricultural good management practices in setting and managing within limits, and that GMP should be the minimum standard for the primary sector.

To meet these obligations, Environment Canterbury has taken a co-design and co-production approach with the

agricultural industry to benchmark N and P losses across a variety of different land uses under GMP and over a variety of different soil and climate types.

### How will the MGM project help?

The MGM will help inform water quality policy processes in Canterbury through improved information on GMPs and expected nutrient losses. This information will also assist farmers to manage land use within water quality limits.

### Who is involved?

The MGM is a collaboration between Environment Canterbury, key primary sector organisations (dairy, outdoor pigs, deer, sheep and beef, arable and horticulture), Crown Research Institutes and farmers. A governance group of cross-sector stakeholders oversees the project and a reference group of primary industry producers provides feedback from the practitioners.

## 2. Excerpt from the MGM page in the Environment Canterbury website

### Why the MGM will be useful

- The matrix will clearly identify expected nutrient losses under GMP. These expected losses will form benchmarks for farmers.
- Environment Canterbury will have good estimates of nutrient losses under a range of land uses. This will assist them in their understanding of current and future catchment loads.
- Environment Canterbury and local communities will have good-quality information from which to explore policy options to balance environmental, social, economic and cultural outcomes against community expectations of water quality.
- On a national level, the Matrix of Good Management project may be a useful tool for informing the New Zealand-wide challenge of intensifying land uses and deteriorating water quality. If the MGM approach is successful and endorsed by the community and industry, other councils and industries may be able to apply a similar approach in their region, with savings in cost and time.
- The MGM project will provide information that can support the implementation of GMP on farms by providing a robust benchmark of their nutrient loss under GMP.
- The project will also provide research to assist with improvements in the accuracy of the Overseer® model.