

Tabled at Hearing on 5 November 2015

IN THE MATTER

of the Resource
Management Act 1991
(RMA)

AND

IN THE MATTER

of the Proposed
Variation 3 to the
Canterbury Land and
Water Regional Plan

TO BE HEARD BY

Canterbury Regional
Council

**Submission Statement of Gregory Philip Sneath
on Behalf of the Fertiliser Association of New Zealand**

5 November 2015

Qualifications and Experience

1. My full name is Gregory Philip Sneath. I graduated from University of Queensland, St. Lucia, Brisbane, Australia, with a Bachelor of Agricultural Science, with Honours.
2. I am currently employed as Executive Manager with The Fertiliser Association of New Zealand. I have been with The Fertiliser Association of New Zealand for over 10 years, and have certificates of completion for both the Intermediate and Advanced courses in Sustainable Nutrient Management in New Zealand Agriculture, at Massey University.
3. Representing the Fertiliser Industry I have engaged with Regional Council staff throughout New Zealand involved in the disciplines of policy, land management and science. I have participated in stakeholder workshops, advisory groups and industry consultations in relation to nutrient management and the development of Regional Plans, including engagement within the pan sector industry groups addressing the Proposed Canterbury Land and Water Regional Plan, Tukituki Proposal, Otago Regional Council Plan Change 6A, Southland Regional Council Land and Water Group, Greater Wellington Regional Plan Stakeholder groups, Horizons One Plan development and others.

Introduction

4. The Fertiliser Association of New Zealand ('FANZ' or 'the Association'), is a trade organisation representing the New Zealand manufacturers of superphosphate fertiliser. The Association has two 'member companies' – Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both these companies are farmer co-operatives with some 45,000 farmer shareholders. Between them these companies supply over 98% of all fertiliser used in New Zealand.
5. The member companies have invested significantly in systems and capability to reliably estimate and document nutrient cycling on farms, with the purpose of providing sound advice and recommendations for nutrient management to support viable economic production and environmental responsibility. The systems and procedures used are applied in the same way nationally, but recommendations are specific to farmer goals, industry targets and regional council regulation. National and in particular regional consistency in the approach and framework for nutrient management is highly desirable.
6. The Fertiliser Association, along with Ministry for Primary Industries and AgResearch is a one-third owner of OVERSEER® Nutrient Budgets.
7. The Fertiliser Association takes a particular interest in regional policy statements and regional plans in terms of supporting provisions that enable the sustainable

management of natural and physical resources, and seeking that any regulation of land use activities that may use fertilisers is appropriate and necessary.

8. A summary of submission points discussed here are as follows:

Key Matters

- **Rule 15.5.5:** Seeking amendment of prohibited activity to discretionary. The submission acknowledges some level of discretion in using modelled outcomes is required due to the very significant consequence of mild exceedance. Uncertainty in estimates for N loss, catchment modelling, catchment load and attenuation makes it inappropriate for tools designed to inform decisions being used instead to make significant decisions such as prohibited activity.
- **Rule 15.5.8:** Seeking amendment of prohibited activity to discretionary or non-complying activity based on consideration that prohibited activity decided by mild exceedance of modelled outcomes is inappropriate as per discussion on Rule 15.5.5
- **Rule 15.5.10 :** Seeking amendment to prohibited activity to discretionary activity or non-complying activity based on consideration that mild exceedance of modelled outcomes deciding prohibited activity is inappropriate as per discussion on Rule 15.5.5
- **Rule 15.5.12:** Seeking amendment to prohibited activity to discretionary activity or non-complying activity based on mild exceedance of modelled outcomes (as provided by Table 15(p) values) deciding prohibited activity being inappropriate.
- **Table 15(p):** Seeking amendment to the load limits of 0 t/yr and 1 t/yr, which do not appear to be justified by the Technical Reports and which make matters of discretion for discretionary consents impossible to achieve.

Additional Matters

- **Definition of New Farming Activity:** Improving interpretation to provide for routine rotational land use activity.
- **Policy 15.4.5:** Supporting new policy 15.4.5A with amendment to provide for change in land-use for commercial reasons provided N loss commitments are being met.
- **Policy 15.4.12:** Seeking amendment to improve clarity and to use terms defined in the CLWRP to address transfer of nitrogen nutrient discharge allocation and avoid confusion arising from the expression 'sharing nitrogen'.
- **Policy 15.4.13:** Seeking a minor amendment to improve clarity about the requirement to being part of a Nutrient User Group as opposed to establishing a Nutrient User Group.

- **Rule 15.5.11:** Accepting retention of Rule 15.5.11 as notified with support for the additional Rule 15.5.12A
- **Table 15(m):** Supporting the new footnote proposed by Ravensdown to provide for updating target loads when there is a new release of OVERSEER
- **Table 15(n):** Seeking amendment to provide for exemption for extremely light soils in the Northern Streams Area and Waihao-Waiono Area, to give effect to Policy 15.4.5

Main Hearing Submission

Definition: New Farming Activity

Original Submission:

9. The Fertiliser Association (FANZ) noted that within the definition of “New farming activity” seasonal activity and crop rotations might not occur on a property at 1st May 2015, but are not a new land use activity for the catchment when introduced on rotation.
10. The FANZ sought an amendment for example: “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”.

Officer report response:

11. The Officer report acknowledged [paragraph 10.99] the concerns raised by Fonterra and Dairy NZ in regards to the use of the term “new farming activity” and agreed that the existing definition of the term is ambiguous and requires amendment to clearly set out the threshold for change from an “existing farming activity” to a “new farming activity”.
12. The Officer report states [Paragraph 13.59] that the current definitions of “new” and “existing” land use do not provide sufficient direction for plan users, particularly as the definitions do not expressly allow for routine or seasonal variations in farm practices. It states the purpose of these definitions was to ensure that any change in land use (i.e. a conversion) on a property that is enabled by having access to a higher N loss allowance by joining a Farming Enterprise, Nutrient User Group or Irrigation Scheme, immediately meets the Maximum Cap.
13. [Paragraph 13.60] This concept is still considered important as they form part of a mechanism to enable land use development to occur while still meeting the

freshwater objectives for the South Coastal Canterbury area. It is recommended the definitions are amended to provide for this scenario.

14. The Officer report recommended that [R3.61], that the definition of “New Farming Activity” is retained as notified. [i.e. “*means a farming activity that was not in existence on the property at 1 May 2015.*”]
15. However, the Officer report also recommended [R3.62], that the definition of an “Existing Farming Activity” is amended as follows:

means a farming activity in existence on the property at 1 May 2015 and includes all activities undertaken during the period of 01 July 2009-30 June 2013 whether seasonal or rotational

Comment:

16. The Officer report recommendation to amend the definition for existing farm activities by adding this phrase is supported but on its own does not completely address the issue for new farm activities.
17. Although FANZ did not submit on the definition of the Existing Farm Activity, the amendments proposed by the Officer report goes some way towards reducing ambiguity on Existing Farming Activity and is supported.
18. FANZ considers however the retained definition for New Farming Activity still remains ambiguous, and should be amended as per the FANZ submission.

Relief Sought:

19. Amend the definition for New Farming Activity to include (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

Policy 15.4.5

Original Submission:

20. FANZ noted that Policy 15.4.5 provides for an exemption for existing farming activities on ‘extremely light soils’ from complying with maximum caps by 1 January 2030, however the rules and Table 15 (n) do not provide any specific exemption for farming activities on extremely light soils.

21. FANZ sought, to introduce in the rules or alternatively an amendment to Table 15(n), an exemption for existing activities on extremely light soils to meet the maximum cap by 2030, and provide for this to be met over the longer term as is consistent with Policy 15.4.5

Officer report response:

22. The Officer Report recommendation [Paragraph 10.102] is that:

Policy 15.4.5 be deleted and replaced with the following two policies:

Policy 15.4.5

Improve water quality in the Northern Stream Area and Waihao-Wainono Area while providing flexibility in land-use by:

- (a) permitting farming activities whose estimated nitrogen losses do not exceed the flexibility cap limits set out in Table 15(m);
- (b) allowing farming activities whose estimated nitrogen losses exceed the flexibility cap in Table 15(m) provided there is no increase in the nitrogen baseline for the farming activity, and
- (c) requiring farming activities with estimated nitrogen losses that exceed the maximum caps in Table 15(n) to start reducing their nitrogen losses and to comply with the maximum cap in Table 15(n) by no later than 01 January 2025; and
- (d) allowing new farming activities to exceed the nitrogen baseline (in accordance with Policy 15.4.10), provided the estimated nitrogen losses do not exceed the maximum nitrogen cap in Table 15(n).

New Policy 15.4.5A

Notwithstanding Policy 15.4.5, on soils shown on the Planning Maps as extremely light, allow farming activities with estimated nitrogen losses which exceed the maximum cap in Table 15(n) to continue past 01 January 2025 provided that:

- (a) the farming activity is subject to a Farm Environment Plan which shows how the maximum cap will be met and by what timeframe; and

(b) there is no change in land use, unless that change of land use is part of facilitating nitrogen loss reductions under the Farm Environment Plan.

Comment:

23. Although FANZ did not specifically seek a change to Policy 15.4.5, the proposed amendments to include a new Policy 15.4.5A is accepted, with the exception of the retention of the reference in Policy 15.4.5A (b) "*no change in land use unless it is to facilitate N loss reductions*".
24. FANZ remains concerned that farm systems require flexibility to respond to seasonal and market conditions. If the N loss above baseline levels on the extremely light soils is accepted beyond 1 January 2025, in recognition of the difficulty in meeting N loss limits under these circumstances, then a change in land use for any commercial reason, should be provided for, subject to Policy 15.4.5A a) being complied with, i.e. *(a) the farming activity is subject to a Farm Environment Plan which shows how the maximum cap will be met and by what timeframe;*
25. Provided the N loss is being addressed in a consistent fashion, FANZ can see no reason why any change in land use for commercial reasons should be ruled out.
26. FANZ also notes the proposed amendment of time frames from 2030 to 2025. While this may be achievable in some situations FANZ is concerned that the time frames of 10 years to meet discharge limits may be too short for some properties and the original provision for meeting the maximum cap by 2030 should be retained.

Relief Sought:

27. Accept the Officer Report recommendation for amendment to Schedule 24a (a) as shown above.
28. Retain the new proposed Policy 15.4.15 A, but delete Policy 15.4.5 A (b)
29. Retain the timeframe to 2030 in Policy 15.4.5 and the Proposed new Policy 15.4.5A, (plus all consequential amendments)

Policy 15.4.12

Original submission

30. Policy 15.4.12 requires the restriction of nitrogen movement between properties. However, as nitrogen (the element) will inevitably cross property boundaries, it is

assumed this Policy is intended to refer to the transfer of nitrogen “nutrient discharge” allocation. The term “nutrient discharge” is defined in the CLWRP and so FANZ considers this term should be used for added clarity.

31. FANZ sought to amend Policy 15.4.12 to refer to nitrogen nutrient discharge allocation as follows:

Maintain water quality by restricting the ~~movement~~ transfer of nitrogen nutrient discharge allocation between properties unless:

Officer report response

32. The Officer report [Paragraph 10.2.48] recommends a minor amendment to clarify the intent of the policy as follows:

Maintain water quality by restricting the ~~movement~~ sharing nitrogen between properties unless:

(a) the property is part of a Farming Enterprise or Nutrient User Group; and

(b) the combined nitrogen loss calculation from all properties forming the Nutrient User Group does not exceed the sum either:

(i) the flexibility cap for the respective area; or

*(ii) the nitrogen baselines for the respective area whichever is the greater;
and*

(c) the maximum cap is not exceeded on any individual property

Comment

33. FANZ considers that the Officer report recommendation to address clarity about “movement of nitrogen” does not really address issue as the issue relates to the term ‘nitrogen’. Nitrogen is present in many forms and compounds. It is not possible to restrict the movement of nitrogen or share nitrogen in this regard. The plan however does set limits on nitrogen ‘nutrient discharge’ estimated by the use of the model OVERSEER®.
34. The CLWRP has a definition for ‘nutrient discharge’ and this policy would appear to apply to the transfer of nitrogen “nutrient discharge” (meaning: “nutrient loss from the property by surface runoff or by leaching below the root zone”) or alternatively the CLWRP provides a definition for “nitrogen loss calculation”.
35. The Officer report [Paragraph 10.149] identifies that the intention is in fact to share “nutrient loss allowance”

Relief Sought

36. Amend Policy 15.4.12 to refer to nitrogen nutrient discharge allocation as follows:

Maintain water quality by restricting the ~~movement~~ sharing of nitrogen nutrient discharge allocation between properties unless.....

Policy 15.4.13

Original submission

37. FANZ sought greater clarity on Policy 15.4.13. FANZ considers, it implies that applications for resource consent to manage nutrient loss, are obliged to establish a Nutrient User Group, and the Nutrient User Group is used to describe the procedures and methods etc. FANZ assumes the intent is that it is required to be part of Nutrient User Group.

Officer report response

38. The Officer report [Paragraphs 10.250 and 10.251 9.112] acknowledges it received ten submission and six further submissions. Two submissions sought to retain as notified and four submissions sought greater clarity of the intent of the Policy.
39. The Officer report recommendation is for Policy 15.4.13 to be retained as notified.

Comment

40. The issue about clarity of intent of Policy 15.4.13 does not appear to be addressed in the Officer report response and the FANZ interprets that the Policy 15.4.13 requires that applicants for a resource consent to manage nutrient loss, must establish a Nutrient User Group.
41. A Nutrient User Group is defined as;

"a group of properties in multiple ownership, where the owners of those properties undertake farming activities and operate as a collective for the purposes of nutrient management."

42. FANZ also notes, that the proposed Rule 15.5.3 requires that a farm activity which is not part of a Nutrient User Group, but does not comply with permitted activity conditions for Rule 15.5.2, must apply for restricted discretionary consent, with matters addressed to including nitrogen loss from the farming activity.

43. Policy 15.4.13 appears to require such a property to establish a Nutrient User Group.
44. If this is the intent of the Policy then FANZ accepts the Officer report recommendation to retain the policy as written. However, in this event there do not appear to be any rules requiring such a property to establish a Nutrient User Group.
45. FANZ does not understand from the Officer report response whether the intent of Policy 15.4.13 is as it states to “Manage nutrient losses by requiring applications for a resource consent to establish a Nutrient User Group” or more likely, simply requires that such a property be part of a Nutrient User Group.
46. FANZ considers the Policy remains ambiguous in its wording.

Relief Sought:

47. If the Policy 15.4.13’s intent is as stated above, the Fertiliser Association considers there is a need to introduce rules to give effect to the requirement for properties applying for resource consent to manage nutrients to establish a Nutrient User Group. If otherwise, FANZ seeks the intent of Policy 15.4.13 is clarified.
48. This clarification may be achieved quite simply by amending as follows:
“~~establishes~~ being part of a Nutrient User Group”

Rule 15.5.5

Original submission

49. Rule 15.5.5 requires that any farm activity not part of a Nutrient User Group, Farm Enterprise or Irrigation Scheme, which does not meet conditions 1(a), 1(c) or 4 of Rule 15.5.2 is a prohibited activity.
50. FANZ sought amendment of the activity status for Rule 15.5.5 by deleting ‘prohibited activity’ and inserting ‘discretionary activity’.

Officer report response

51. The Officer report [paragraph 10.215] recommends amendments to Rule 15.5.5 to accommodate proposed new rules, but retains Prohibited Activity status.

Comment

52. The Fertiliser Association remains concerned that the consequences of tripping directly from permitted to prohibited activity are significant.
53. Tripping to prohibited activity can relatively easily occur where N loss estimates are close to the caps. Prohibited activity could be triggered, for example, with an increase of estimated nitrogen loss of just 1 or 2 kg N/ha/yr, over a 3 year review period, which may not be the result of any significant farm system change.
54. FANZ contends that OVERSEER Nutrient Budgets Model should be recognised as a **“Decision Support”** tool. It is used to provide comparison and benchmarks to aid in making decisions about different farm management choices and to better understand the likely impact of these management choices on the nutrient cycling on the farm through modelled estimates.
55. The Fertiliser Association believes it is entirely inappropriate to use this decision support tool in a way that removes all discretion and judgement in decisions arising from the model outputs.
56. To put it another way, the outputs of a decision support tool **should not be used to make the decisions**, but rather it **should be used to aid and inform decisions**.
57. Prohibited activity status which is decided strictly on the decision support tool outputs, as proposed in Rule 15.5.5, removes all flexibility for informed interpretation and judgement.
58. OVERSEER Nutrient Budgets Model outputs are more typically used as ‘drafting gate’ for restricted discretionary activity and discretionary activity where the results are part of the informed decision making process for consents.
59. It is recognised that there is comfort in using OVERSEER estimates to decide a threshold for permitted activity. The difference in this application of the OVERSEER values is a matter of risk assessment and the clear benefits of an output based approach to managing nutrient loss.
60. There is an uncertainty factor associated with nutrient loss estimates derived by OVERSEER, and most likely an even greater uncertainty in Catchment modelling and even greater uncertainty in attenuation due to very little being known about attenuation factors.
61. Despite the uncertainty on the estimates and modelling for each of these systems, the risk associated with the decision being made by the decision support tool for permitted activity is small relative to the benefits, however, that is not the case for prohibited activity status. Decisions being made on prohibited activity based on an OVERSEER value which might only be different by 1-2 kg N /ha/yr introduces potentially very significant economic and social costs, with very uncertain environmental benefits.

62. In saying that 'Prohibited Activity' status is inappropriate for a mild exceedance of the N loss limit, it might be considered appropriate for a gross exceedance (e.g. + 10 or 20 kg N/ha/yr above the modelled acceptable limit - but if written into the plan in this way, what signal would this send land managers about the N loss limits? FANZ considers a regulatory limit is useful, but discretion for mild exceedance of values based on modelled estimates is necessary where the potential consequences are significant.
63. Using OVERSEER Nutrient Budget Model, or any other decision support tool, in the way proposed in this Plan Change, to make the decisions on prohibited activity status is in the opinion of the Fertiliser Association an inappropriate use of the decision support tool.

Relief Sought:

64. As per FANZ submission, amend the activity status for Rule 15.5.5 by deleting 'prohibited activity' and inserting 'discretionary activity' .

Rule 15.5.8

Original submission

65. FANZ noted that Conditions 2 and 3 of Rule 15.5.8 mean that a farm activity can be tripped to prohibited activity due to a mild increase in N loss, for example, of just 1 or 2 kg N/ha/yr, if this results in exceeding the respective N loss threshold. The consequences of tripping to prohibited activity are significant. Prohibited activity removes all flexibility to manage the land use activity through discretionary consent or through evidence of less than minor adverse effects for a non-complying activity.
66. FANZ sought the deletion of Rule 15.5.8 and to combine the provisions with 15.5.7, with discretionary or non-complying activity status.

Officer report response

67. "Officer report response, [Paragraph 10.269] states:

"While the prohibited activity status afforded to Rule 15.5.8 (non-compliance with conditions 2, 3 or 4 in Rule 15.5.9) does appear to be restrictive, I believe that the purpose of the prohibited activity status, in this instance, is to:

a. ensure that the N loss allowance does not exceed the limits set out in the plan, and

b. provide clear guidelines on who may form a Farming Enterprise (i.e. those located within the same Surface Water Allocation Zone and does not include anyone who is part of an Irrigation Scheme). "

68. [Paragraph 10.270] *"I believe 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"*

Comment

69. FANZ notes that the Officer report concedes that the prohibited activity status is restrictive, but that the purpose of prohibited activity status is to; ensure N loss meets the limits in the plan and to provide guidelines on who may form a Farming Enterprise (within the same surface water catchment).
70. FANZ does not agree that Prohibited Activity is necessary to achieve these aims for N loss.
71. FANZ considers the integrity of the consent process is protected by clear discretionary consent conditions, and may be further assisted by guidance documents.
72. FANZ considers that when addressing the purpose of the rules it also necessary to address the purpose of the RMA where sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.
73. The Fertiliser Association considers this balance requires some discretion in the application of decision support tools, and discretion cannot be provided for with prohibited activity status being decided by the outputs of OVERSEER relative to a max cap as required by this proposed rule.
74. As per discussion above in relation to Rule 15.5.15, the Fertiliser Association considers that using Overseer N loss calculations to decide on prohibited activity status is an inappropriate application of the tool.

Relief Sought:

75. Delete Rule 15.5.8 and combine the provision with 15.5.7, with discretionary activity status, or in the alternative:

Amend Rule 15.5. 8 to specify “non-complying” activity status and not prohibited activity.

Rule 15.5.10

Original submission

76. FANZ noted Rule 15.5.10 requires prohibited activity status applies to use of land for farming activity that forms part of a Nutrient Users Group, where the Nutrient User Group does not comply with one or more of the conditions in Rule 15.5.9. FANZ considers discretionary consent will provide Council sufficient opportunity to control use of land for a farming activity under these circumstances and to apply appropriate controls where the Nutrient User Group fails to comply with conditions of Rule 15.5.9

Officer report response

77. The Officer report comments on Rules 15.5.9 and 15.5.10 together and defends prohibited activity status for Rule 15.5.10 as follows, [Paragraph 10.286] ;

“While the prohibited activity status afforded to Rule 15.5.10 (non-compliance with any condition in Rule 15.5.9) does appear to be restrictive, I believe that the purpose of this activity status is to

a. ensure that consent applications provide the necessary details for a full assessment to be made of their proposed activity; and

b. provide clear guidelines on who may form a Nutrient User Group (i.e. those located within the same Surface Water Allocation Zone and does not include anyone who is part of an Irrigation Scheme or a Farming Enterprise).”

78. [Paragraph 10.287] *“ I believe 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 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.”*

Comment

79. FANZ considers the arguments are no different to those presented by the Officer report on Rule 15.5.8 and the reasons for opposing prohibited activity status for Rule 15.5.10 are the same as presented for Rule 15.5.8 above.

Relief Sought

80. The Fertiliser Association considers 'Discretionary' consent is appropriate for effective management of activities under Rule 15.5.10, in which case restricted discretionary activity status should apply to Rule 15.5.9.

Alternatively, non-complying would remain an option for the activity status of Rule 15.5.10

Rule 15.5.11

Original submission

81. FANZ submitted that as Rule 15.5.11 addresses matters relating to nutrient loss and a set of conditions for the Nutrient User Group, the activity status should be restricted discretionary, with matters of discretion restricted to nutrient management and those matters listed in the conditions in the rule.

Officer report response

82. The Officer report [Paragraph 10.310], recommends the rule is retained as notified, but recommends [paragraph 10.312] the introduction of an additional Rule 15.5.12A to provide for permitted activity provided; *"the irrigation scheme holds a consent that is subject to conditions that specify the maximum rate of discharge that may be leached from the land for the area where the property is located"*

Comment

83. FANZ will not pursue its submission point on 15.5.11 and accepts the Offer report recommendation for a new Rule 15.5.12A

Relief Sought

84. Support the Officer report recommendation for a new Rule 15.5.12A

Rule 15.5.12

Original submission

85. FANZ interpreted that Rule 15.5.12 could require that any discharge of nutrient into or onto land within an irrigation scheme, even those performing to a high standard are prohibited activity, if the catchment loads in Table 15(p) are exceeded. FANZ considers that the consequences of prohibited activity for land-users, if not the region, are potentially very significant.
86. FANZ considers the rule can be managed equally effectively under Discretionary activity status.

Officer report response

87. The Officer report does not specifically address the activity status of the rule other than to recommend a new permitted activity rule 15.5.12A.
88. The Officer report recommends [Paragraph 10.311] Rule 15.5.12 is retained as notified.

Comment

89. Fertiliser Association notes once more the trigger for prohibited activity under Rule 15.5.12 and Rule 15.5.11 (1) is based Table 15(p) values which are derived from catchment modelling and attenuation assumptions with a high level of uncertainty.
90. Despite the recommended introduction of Rule 12.5.12A, FANZ interprets that if the nitrogen load limits in Table 15(p) are exceeded even mildly, the discharge of nutrients (any nutrient?) within an irrigation scheme, which may result in contaminants entering water is prohibited under Rule 15.5.12.
91. Taken as worded, the discharge of all nutrients within the command area of an irrigation scheme under this circumstance would be a prohibited activity with significant economic and social consequences.
92. As presented in the discussion above the Fertiliser Association considers prohibited activity status is inappropriate when it may arise from a relatively mild exceedance of limits derived from modelling for farm losses, catchment loads and attenuation, all of which have uncertainty factors which apply.

Relief Sought

93. FANZ seeks amendment of the activity status provide by Rule 15.5.12, from prohibited to discretionary activity, or in the alternative, non-complying activity.

Table 15(m)

Original submission

94. FANZ noted the provision for a flexibility cap is supported, however, depending on area and timeframes, considered the flexibility caps proposed may or may not be the correct values as new science, information and experience is gained.
95. FANZ sought the opportunity to amend Table 15 (m) values through a plan change

Officer report response

96. Specifically in relation to updates to OVERSEER the Officer report says, [Paragraph 10.387];

"While other solutions put forward (including updating the N numbers in a schedule) have merit, the submissions do not contemplate how these methods will be implemented. Without further consideration as to how fixed N caps can be altered without a plan change or variation, I do not recommend these submission points are adopted."

[Paragraph 10.388] *"As an immediate solution, the nitrogen loss limits in Table 15(m) have been recalculated using the most recent version of OVERSEER® (version 6.2). I note that the revised initial calculations did not result in significantly different numbers, as such I do not recommend that the Flexibility Caps are amended at this time. I do recommend that the table includes reference to the version of OVERSEER® used to calculate the limits"*

Comment

97. The Officer report leaves open the question of how to amend that Table 15 (m) when a new version of OVERSEER is released, and simply recommends a footnote identifying the version used to determine the flexibility cap values within Table 15(m).
98. While this adds clarity for the OVERSEER version used to arrive at the values on Table 15(m), the recommendation by Ravensdown recommends a further step to address the question raised by the Officer report.
99. Mr Hansen's Hearing evidence at paragraph 210, seeks to include in the footnote to Tables as follows:

"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.”

Relief Sought:

100. This recommendation by Ravensdown for the footnote to Table 15(m) is supported.

Table 15(n)

Original submission

101. FANZ supported the provision for Maximum Cap to be achieved by existing land use by 2030, as a realistic timeframes to achieve nitrogen loss targets is important.
102. FANZ noted the maximum caps of 35, 25 and 20 kg N /ha/yr depending on soil type, may or may not be the correct values as new science, information and experience is gained.
103. In addition, FANZ noted there was no provision for exemption for existing farming activities on ‘extremely light soils’ as required by Policies 15.4.5 and 15.4.6 and suggested this can be achieved with an amendment to Table 15(n).

Officer report response

104. Paragraph 10.397 of the Officer report recommends :

“The revised modelling indicates that the Maximum Cap for poorly drained soils requires amendment to a higher N loss number. As such, I recommend the Maximum Cap for poorly drained soil, as set out in Table 15(n) is replaced with the updated numbers, with specific reference to the version of OVERSEER® used to calculate the limits”.

Comment:

105. FANZ supports the amendments recommended by the Officer report, however, in addition supports providing for updating the Table 15(n) values with a new version of OVERSEER as discussed and recommended above for Table 15(m).
106. In relation to extremely light soils, it is noted that the proposed wording for Policy 15.4.5(a) provides for properties in the Northern Streams Area, and Waihao-

Waiono Area on extremely light soils to be exempt from having to meet the maximum cap by 1 January 2030.

107. The recommended amendments from the Officer report for a new Policy 15.4.5A provides for this exemption from 2025.
108. However the FANZ cannot see anywhere in the Rules or the Table 15 (n) which gives effect to this aspect of the proposed policy or the recommended amended policy.
109. FANZ considers the exemption could be provided for with amendment to Table 15(n) to include exemption for properties in the Northern Streams Area, and Waihao-Waiono Area on extremely light soils.

Relief Sought:

110. To give effect to Policy 15.4.5, FANZ seeks amendment to Table 15(n) to include exemption for properties in the Northern Streams Area, and Waihao-Waiono Area on extremely light soils.

Table 15(p)

Original submission

111. One key aspect of FANZ submission on Table 15(p) was to seek re-evaluation of the '0 t/yr' and '1 t/yr' limits presented in Table 15 (p), or in the alternative if the nitrogen loss limits are adequately controlled by the provisions and rules within Variation 3, delete Table 15 (p) and make any consequential changes to the Variation 3.

Officer report response

112. In relation to the '0 t/yr' and '1 t/yr' load limits in Table 15(p) the Officer report comments [Paragraph 10.422]:

"It is important to retain limits that specify either zero or one Tonne as they indicate that there is to be no or little increase in N losses within those areas. I note that exceeding N load limits only becomes a prohibited activity for irrigation schemes. I do not recommend that submissions seeking to delete these limits are accepted."

Comment

113. It remains of concern to FANZ that that Table 15(p) requires a “0 t/yr” nitrogen loading limit for farming activity in Horseshoe Hill Area, Morven-Sinclairs Hill Area, and a limit of just 1 t/yr in the Kohika Hill Area.
114. It is generally recognised that forestry or native forest will have an N loss value of at least 2 -3 kg /ha/yr and so is not going to be able to comply with a 0 t/ha load limit, and an area of forest 333-500 ha may exceed the 1 t/yr load, depending on assumptions of attenuation.
115. Low intensity farming operating with good management practice is unlikely to have lower N load than native or exotic forests.
116. While the Prohibited Activity status arising from application of Table 15(p) only applies to farms in an irrigation scheme, under Rule 15.5.4 non-complying activity applies to other farm activities. This arises with reference to Table 15 (p), along with the flexibility caps as a matter of discretion for restricted discretionary consent under Rule 15.5.3.
117. FANZ remains concerned that requiring a total load limit of 0 t/yr or 1 t/yr remains an unreasonable matter for consideration in relation to restricted discretionary consent because it is likely to be unachievable under any circumstance.
118. The Officer report response identifies the principle of no increases in load limit, however this appears to miss the key point that the Table 15(p) does not represent ‘increases’ in load limits but represents ‘total’ load limit in t/yr.
119. In this regard FANZ believes the Officer report has failed to address the issue.
120. The Officer report [Paragraph 10.420] cites ‘*Environment Canterbury Technical Report No. R15/29*’ for justification of 0 t/yr and 1 t/yr load limits for these areas. This report is titled: ‘*South Canterbury Coastal Streams Limit Setting Process: Predicting consequences of future scenarios: Overview Report.*’
121. FANZ could not find any reference within this report recommending or indicating a requirement for load limits of 0 t/yr and 1 t/yr for these areas.
122. FANZ notes that the Technical Report: ‘**Process and outcomes of the Nitrogen Allocation Reference Group (NARG) for the South Canterbury Coastal Streams area. Report No. R14/110**’, Dec 2014, at Appendix 2, NARG Final Agreement (page 14) states that :

“It was agreed that for Morven and Sinclairs, to protect water quality and provide flexibility for land use, this can be provided by ensuring land use is at GMP (as will be defined in the MGM project) and as any future N load reductions from border to spray [irrigation] occur these are managed by MGIS - as agreed already in the February 20th ZIP Addendum.”

123. On page 17 of this document under “Appendix 2 Table A Draft N load limits” it provides for the Morven area a load limit of 307 t/yr and for the Sinclair area a load limit of 61 t/yr, noting this does not limit periphyton in all streams – reduce with shading and increased flow.
124. Under Section 7 “Key elements of the consensus agreed N allocation framework”, (page 8), under 4) Steep Hill country:
- “it was agreed to separate the ‘steep hill’ country (defined in mapping terms as the area covered by soil classes ‘Hurunui’ and ‘Class 7’3 – see Appendix 6) and assign an appropriately low flexibility cap of 5 kg/ha/yr. This was an important part of the framework that allowed the flexibility cap for non-steep hill areas to increase from 10 to 15 kg/ha/yr, as described above. If the assumed flexibility load described above had to be distributed across the entire area (including steep country), it would have been it significantly ‘diluted’ such that the flexibility cap would only have increased slightly rather than lifting to 15 kg/ha/yr. It was assumed that steep hill country land users could average their ‘steep hill’ losses across their ‘steep hill’ area (but not outside that area) in order to stay within the 5 kg/ha/yr as an average.”*
125. FANZ considers that in consideration of the agreement stated on page 14, shown above for “Morven and Sinclairs, to protect water quality and provide flexibility for land use, this can be provided by ensuring land use is at GMP..” and with accepted hill country N losses at least of 5 kg /ha/yr, it is not at all clear to the Fertiliser Association why Table 15 (p) requires a total N loading of “0 t/yr ” from Morven – Sinclair hill country.
126. Table 15(p) total loads are listed as a matter of discretion for Restricted Discretionary consent under Rule 15.5.3.
127. Where the load limit is 0 t/yr or 1 t/yr, the requirement to consider “*whether the nitrogen loss from the farming activity will result in the total catchment load limits as per Table 15(p)..... being exceeded*” would appear to be unrealistic and unreasonable for deciding a restricted discretionary consent for farming in this area.
128. By way of further background on the values included in Table 15(p), it is noted also in Table D, Draft N load limits for **urban and industrial discharge limits**, of Report No. R14/110’ (page 19), it recommends for the Morven –Sinclair area a ‘0’ t/yr N load, with justification that “***there are no existing urban and industrial discharge limits and no provision for new discharge.***”
129. FANZ considers that while there may be merit in a ‘0’ t/yr load for urban and industrial discharge, as recommended in the Technical Report, it is not clear to FANZ how this has translated to a requirement for a ‘0’ t/yr load limit for farming

activity in this region, the consequence of which would potentially prevent any restricted discretionary consent from being issued for farming in this area.

130. FANZ questions provisions in a plan which sets matters for consideration which in all likelihood can never be met. (i.e. whether the N loss from farming activity will result in a load limit of 0 t/yr or 1 t/yr being exceeded, when any area of native forest with an estimated N loss at 2kg N/ha/yr would not meet the zero load limit, and over 500 ha of native forest would fail to meet the 1 t/yr limit, assuming no attenuation)

Relief Sought:

131. Clarify the intent of the load limits for farming in the Morven-Sinclair Hill area, Horseshoe Plains Hill area, and Kohika Hill area in Table 15(p).
132. Review and amend the N load in Table 15(p) for Morven-Sinclair Hill area, Horseshoe Plains Hill area, and Kohika Hill area which currently propose '0' and '1' t/yr load values. Amended load limit values should give recognition to farming operating under Good Management Practices at accepted N loss values for farming within these areas.

Schedule 24b - Farm Practices: (a) (i) Nutrient Management

Original submission

133. FANZ noted Schedule 24b (a)(i) requires that a nutrient budget is reviewed annually. FANZ considers that producing a nutrient budget annually is inappropriate, and sought this is amended to be consistent with the wording proposed in the Variation 2 s.42A Report.

Officer report response

134. The Officer report [Paragraph 10.438] has recommended an amendment to Schedule 24b (a)(i) which is consistent with FANZ request.

Comment

135. The amendment recommended for Schedule 24b(a)(i) is consistent with that sought by the Fertiliser Association and is supported.

Relief Sought

136. FANZ seeks the Officer reports recommended wording for Schedule 24b(a)(i) be adopted.

Concluding Statement

137. Thank you for the opportunity to present this Hearing submission before the Hearing Panel for Proposed Variation 3 of the Canterbury Land and Water Regional Plan.

End



Greg Sneath

Executive Manager

The Fertiliser Association of New Zealand

2 November 2015

