

**IN THE MATTER**

of the Resource  
Management Act 1991  
(RMA)

**AND**

of the Proposed Variation 5  
to the Canterbury Land and  
Water Regional Plan

**IN THE MATTER**

Canterbury Regional Council

**TO BE HEARD BY**

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**Responses to Questions from the Hearing Panel  
at Hearing Submission by Gregory Philip Sneath  
on behalf of the  
Fertiliser Association of New Zealand**

Submitter ID: 51972

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## **Response to Hearing Panel Questions on the Submission on the Proposed Plan Change 5 to the Canterbury Land and Water Regional Plan**

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### **Introduction**

1. The Fertiliser Association of New Zealand ('FANZ' or 'the Association') attended the Hearing on the Proposed Plan Change 5 to the Canterbury Land and Water Regional Plan at the **Lincoln Events Centre**, on **23<sup>rd</sup> August 2016**
2. A number of submission points in the original submission, (as shown in the table below), sought change but were not specific in the 'decision sought'. In particular, it was noted a number of submission points requested Canterbury Regional Council to provide for an alternative consenting pathway for farm systems which cannot be addressed by the Farm Portal or for which the Farm Portal is inadequate.
3. The question was asked: "*Which submission points from the FANZ submissions or any other submissions on the Proposed Plan Change 5 would satisfactorily address the particular FANZ submission points identified ?*" (listed below).
4. The following table identifies the original FANZ submission points in question and then also identifies submissions by other parties with "Decisions Sought" which address FANZ original submission points.
5. As a broad overview, it is noted that the Hearing submissions by planning consultants on behalf of Fonterra, (Mr Gerrard Willis) and on behalf of Ravensdown, (Mr Chris Hansen) address an alternative consenting pathway, with very specific recommendations for the wording of Policies and Rules.
6. While both submissions are similar in approach, there are differences noted by FANZ, and when regarding these differences, FANZ recommends a preference to support the decisions sought by Mr Chris Hansen on behalf of Ravensdown. The reasons for giving preference to Mr Hansen's recommendation are as follows:
7. It is noted that one significant difference in the approach between Fonterra's Hearing submission and Ravensdown Hearing submission on the proposed wording of policies and rules is that Fonterra retains support for the application of "prohibited" activity status where a farm's OVERSEER N loss estimate does not meet the prescribed values. This approach is not consistent with FANZ view that it is inappropriate to use OVERSEER Nutrient Budget model to decide activity status for prohibited activity without discretion. FANZ does not consider that prohibited activity status is the only option to ensure satisfactory Good Management Practices and N loss limits are enforced.
8. OVERSEER provides an annual average, broad brush estimate of nutrient cycling in a farm system and is utilised as a decision support tool. Permitted activity thresholds provide a high level of confidence that N loss is within acceptable limits. However, given the large uncertainty in catchment modelling, farm system modelling and estimates of water quality

impacts, the economic and social consequences of prohibited activity for a farm with a mild exceedance of N loss could far out-way the risk of environmental consequence. Prohibited activity should apply only to practices which are clearly beyond all acceptable actions and where there are clearly unacceptable consequences. An N loss estimate using OVERSEER which in all cases is clearly beyond acceptable norms could be utilised as a prohibited activity threshold, but, if applied in this way, the N loss value should be well beyond the margins of Good Management Practice. FANZ considers that to select such a value for N loss estimate to represent 'Prohibited Activity' would send all the wrong signals to land users. To put it another way, OVERSEER estimates for N loss associated with Good Management Practices are expected to be well below a margin of confidence which should apply to a Prohibited activity value. Discretionary consent, as proposed in Mr Hansen's Hearing evidence provides for informed judgement when deciding resource consents and can send the correct signals regarding the limits of desirable N loss based on current science. Under Discretionary activity appropriate use of OVERSEER as a decision support tool is provided for.

9. It is also noted in FANZ original submission, [paragraph 9] that there have been a wide range of views expressed on the Farm Portal, including several submitters, (e.g. Submitter no's, 267, 1240, 810, 1439, 2649), with sufficient concern to seek the Farm Portal be removed from Plan Change 5 entirely. In FANZ Hearing submission [paragraphs 55 to 57] FANZ also observed that an alternative to the farm portal or where the farm portal is inadequate could rely instead on nutrient budget results from audited good management practice to define the N loss values for a range of 'typical farm systems' when farming responsibly. (i.e. *"the reported GMP N loss from similar audited "A" grade farms could provide a bona fide estimate of GMP N loss"*). Farms with comparable farm systems, soil and climate but with N loss significantly greater than the typical range of GMP N losses demonstrated under audited assessments, would fail to comply and require increased scrutiny. Given the highly variable nature of farm systems, clear guidance documents on such an assessment process would be required. However, FANZ has not formally pursued this option and has continued to support the process based on MGM.
10. FANZ has retained good will in supporting the development of the on-going MGM project and resultant Farm Portal, and specific comment in relation to identified FANZ submission points and alternative consent pathways for policies and rules are provided below.

<b>(1)</b> The specific provisions of the Proposed Plan that my submission relates to are:		<b>(2)</b> My submission is that: <i>(include whether you support or oppose the specific provisions or wish to have them amended and the reasons for your views.)</i>		<b>(3)</b> I seek the following decisions from Environment Canterbury: <i>(Please give precise details for each provision. The more specific you can be the easier it will be for the Council to understand your concerns.)</i>
Section & Page Number	Sub-section/	Oppose/support (in part or full)	Reasons	
For simplicity, FANZ original submissions point and decision sought are reproduced below only as limited extracts of the original submission points				

<b>ORIGINAL SUBMISSION</b>				
Sect 2 p3-1	Definitions: Baseline GMP Loss rate			<p>Seek a long term solution for robust modelling rules of the Farm Portal, in particular fertiliser modelling rules.</p> <p>Regardless of the modelling rules: Consequential amendment to Policies and Rules such that an exceedance of the Baseline GMP Loss Rate results in restricted discretionary or discretionary consent and not a prohibited activity status.</p>
<b>RESPONSE</b>	<p><b>RE: Long term solution to modelling rules;</b> A long term solution for modelling rules as presented by Dr Alister Metherill’s submission on behalf of Ravensdown and Dr Bruce Thorrold’s submission on behalf of DairyNZ, is supported.</p> <p>While not perfect FANZ considers the fertiliser modelling rules based on nitrogen surplus provides a more practical application because, as described in Dr Metherill’s evidence [paragraph 43], farms with a relatively high N surplus are likely to have a high level of N leaching. Hence a reduction in N input on these farms is likely to have the greatest benefit in reduced N leaching. It is also likely that a reduction in N input on these farms can be achieved with a lower impact on farm production than on farms with a lower level of N surplus.</p>			

	<p>Dr Thorold’s Hearing evidence [Paragraphs 5.13, 5.14] comments that the N Surplus proxy as proposed can be applied directly to all pastoral farms, and application of an N surplus method to arable or horticultural farms is also possible, but would possibly require different thresholds.</p> <p><b>RE: amendment to Policies and Rules such that an exceedance of the Baseline GMP Loss Rate results in restricted discretionary or discretionary consent and not a prohibited activity status</b></p> <p>As discussed in the introduction above, the planning evidence of Mr Hansen (on behalf of Ravensdown) is generally supported, and supported in preference to the recommendation of Mr Willis in relation to those specific policies and rules which Mr Willis proposes prohibited activity status a result of farm systems failing to meet N loss estimates. Prohibited activity status based on OVERSEER N loss estimates is opposed.</p>
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Sect 2 p3-1	Definitions: Farm Portal			<p>Amend the Farm Portal so that in the interim a work around is provided, however over the long more satisfactory and robust modelling rules are sought for determining GMP N loss values.</p> <p>An alternative process is still required as not all farm systems can be satisfactorily be represented in the Farm Portal.</p>
Sect 16 p 6-11	Schedule 28 Good Management Practice Modelling Rules			<p>Amend Schedule 28 to develop a ‘work around’ for the fertiliser modelling rule, or alternative pathway.</p> <p>In addition, provide an alternative pathway for those farms which cannot be addressed by the Farm Portal.</p>
RESPONSE	<b>RE: Amendment to the Farm Portal and providing a long term solution to modelling rules;</b>			

As above, FANZ supports the alternative fertiliser proxy rule based on nitrogen surplus as presented by Dr Metherell and Dr Thorrold. It is recognised the proposed rule are not perfect, but are considered far preferable compared the fertiliser proxy rule proposed in Schedule 28, and if the alternative (N Surplus) fertiliser proxy is adopted it may be further improved over time through plan change.

**RE: Alternative consenting pathway for farm systems not satisfactorily represented in the Farm Portal**

Mr Hansen’s Hearing submission at paragraphs 47 recommends a new policy, Policy 4.38AB which at 4.38AB (c) provides for a qualified adviser, e.g. “Accredited Farm Advisor” or “Certified Nutrient Management Adviser” to justify where the farm portal or Nutrient Budget cannot be representative of the farm N loss, and an alternative consenting pathway requiring a Farm Environment Plan and adoption of Good Management Practices. This suggested policy is given effect to by a recommended new rule 5.46AA [explained in Paragraph 50 for the Red Zones, and to apply equally to the Orange and Lake Zones, and paragraph 51 further explains amendments to condition (iii) in addition to those above, to apply for the Green and Blue Zones).

Mr Willis’s submission provides for very similar approach, to that suggested by Mr Hansen, requiring Certified Farm Consultants to verify that all Good Management Practices are employed, however the suggestion in Mr Willis’s proposal to retain prohibited activity based on N loss estimates is opposed, as the OVERSEER N loss estimates should provide decision support, as occurs with discretionary consent.

Sect 2 p3-2	Definitions; Good Management Practice Loss Rate			Amend the definition for Good Management Loss Rate to provide for those farms systems which the Farm Portal cannot generate a satisfactory GMP loss rate.  Other options for arriving at or describing Good Management Practice N loss rates to be considered.
RESPONSE	<p><b>Re: Amend the definition for Good Management Loss Rate to provide for those farms systems which the Farm Portal cannot generate a satisfactory GMP loss rate.</b></p> <p>No submissions appear to have provided a specific alternative definition, except as discussed above with improved modelling Fertiliser Proxies for use in the Farm Portal, or perhaps as indicated in the FANZ submission where GMP would be defined by</p>			

	<p>aggregated analysis of the N loss reported by farms of similar farm type, soils and climate which have been audited as meeting Good Management Practices ( “Grade A” audited farms). It is noted the Egg Producers board in its original submission simply sought exemption, as OVERSEER cannot be applied to that land use activity.</p> <p><b>RE: Other options for arriving at or describing Good Management Practice N loss rates to be considered.</b> The Hearing evidence of Dr Metherell and Dr Thorold provide alternative methods for generating the GMP N loss rate for pastoral farms with an alternative fertiliser proxy based on N surplus</p> <p>As discussed above, the alternative fertiliser proxy based on N surplus is supported by FANZ.</p>
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FANZ original submission on the following rules and policies sought alternative pathways for circumstances where the farm system cannot be addressed by the Farm Portal. (reproductions below are only limited extracts of the original submission points)				
Part A -				
Red Zones Sect 5 p 5-4	Rule 5-44 A			In addition; provide an alternate pathway for circumstances where the farm system cannot be addressed by the Farm Portal.
Lake Zones Sect 5 p 5-8	Rule 5-52 A			An alternative pathway is required for farm systems that cannot be addressed with the Farm Portal.
Orange Zone Sect 5 p 5-9	Rule 5-54 A			In addition; provide an alternate pathway for circumstances where the farm system cannot be addressed by the Farm Portal.
Orange Zone Sect 5 p 5-9	Rule 5-54 B			Amend Rule 5.54 B condition (2) to provide for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.

Orange Zone Sect 5 p 5-10	Rule 5-55 A			Amend Rule 5.55A condition (2) to provide for an alternate pathway for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.  Under matters for discretion, include provision to consider demonstration of meeting Good Management Practice.
Orange Zone Sect 5 p 5-11	Rule 5-56 AA			Amend Rule 5.56 AA condition (2) to provide for an alternate pathway for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.
Green and Light Blue Zones Sect 5 p 5-12	Rule 5- 57 B			In addition; provide an alternate pathway for circumstances where the farm system cannot be addressed by the Farm Portal.
Green and Light Blue Zones Sect5 p 5-12	Rule 5-57 C			Amend Rule 5.57 C condition (2) to provide for an alternate pathway for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.
Green and Light Blue Zones  Sect5 p 5-13	Rule 5-58 A			Amend Rule 5.58A condition (2) to provide for an alternate pathway for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.
Part B –				
Waitaki Sub-region	Waitaki Sub-region Nutrient Management			



Nutrient Management				
Section 15B P 4-9	Policy 15B.4.18			.... provide for uncertainty in GMP loss rates and an alternative pathway for GMP N loss values.
Sect 15B P 4-10	Policy 15B.4.20			.. provide for an alternative pathway for farm systems that cannot be addressed with the Farm Portal
Sect 15B P 4-11	Policy 15B.4.24			... provide for an alternative pathway for farm systems that cannot be addressed with the Farm Portal.
Sect 15B p 4-14	Rule 15B.5.7			Amend Rule 15.5.7 to provide for an alternative pathway where farm systems cannot be addressed by the Farm Portal to develop GMP Loss rates.
Sect 15B P4-15	Rule 15B.5.10			provide for an alternative pathway where farm systems that cannot be addressed by the Farm Portal to develop GMP Loss rates.
Sect 15B P 4-21	Rule 15B.5.19			Amend Rule 15B.5.19 condition (2) to provide for farm systems which cannot use the Farm Portal to generate a GMP N loss value or a Baseline GMP N loss value.
RESPONSE	<p><b>RE: Alternative consenting pathway for farm systems not satisfactorily represented in the Farm Portal</b>  Comments remain as per discussion above, in response to Sect 2, p3-1, Definition: FARM PORTAL  i.e.  Mr Hansen’s Hearing submission recommends provision for a qualified adviser, e.g. “Accredited Farm Advisor” or “Certified Nutrient Management Adviser” to justify where the farm portal or Nutrient Budget cannot be representative of the farm N loss, and an alternative consenting pathway requiring a Farm Environment Plan and adoption of Good Management Practices. This</p>			

	<p>suggested policy is given effect to by a recommended new rule 5.46AA [explained in Paragraph 50 for the Red Zones, and to apply equally to the Orange and Lake Zones and paragraph 51 for the Green and Blue Zones).</p> <p>Mr Willis’s submission provides for very similar approach, to that suggested by Mr Hansen, requiring Certified Farm Consultants to verify that all Good Management Practices are employed, however the suggestion in Mr Willis’s proposal to retain prohibited activity based on N loss estimates is opposed, as the OVERSEER N loss estimates should provide decision support, as occurs with discretionary consent.</p>
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Section 15B P 4-9	Policy 15B.4.18			Amend Policy 15B.4.18 (b) to provide a clear direction on the extent to which Irrigation schemes can limit N loss such that their contribution to the catchment load and water quality outcomes is controlled and will ultimately meet catchment limits, rather than presenting the catchment limits and outcomes as the control point.
RESPONSE	<p>Policy 15.4.18 (b) (ii) requires that water quality is maintained by requiring:  <i>“... the nitrogen load limit specified in Table 15B(f) and the local in-stream and groundwater quality limits set out in Tables 15B(c) and 15B(e) for the Valley and Tributaries Zone or Whitneys Creek Zone”</i></p> <p>As per response below for Rule 15B.5.10:          No specific mechanism has been identified in the Proposed Plan Change or any submissions which will provide for the Irrigation Scheme or principle water supplier to make an assessment that ensures scheme nitrogen losses do not result in exceeding the values in Tables 15B(c), and 15B(e) for each criteria and each location.</p> <p>As per discussion for Rule 15B.5.10 a solution may be found by an amendment to reference the mechanism in Schedule 27 to provide confidence in meeting the in-water loads in Table 15B(f), and delete reference to Table 15B.(c) and (e).</p> <p>Though not specifically requested a similar approach was submitted on by Genesis Energy (Submission ID 67192)</p>			

Sect 15B P4-15	Rule 15B.5.10			Amend Rule 15B.5.10 to provide a standard or a mechanism by which the risk of exceeding water quality attributes in Tables 15B (c), (d), (e) and (f) can be assessed,
RESPONSE	<p>No specific mechanism has been identified in any submissions which will provide for an assessment, such that it can be known that a <i>“nitrogen loss calculation for the Nutrient User Group does not cause the relevant limits set out in Tables 15B(c), 15B(d), 15B(e) and 15B(f) to be exceeded”</i> as required under 15B.5.10 (3);</p> <p>With the absence of any such mechanism either identified in the proposed Plan Change or identified in any submission on the Plan Change, FANZ does not understand how this provision can be complied with. FANZ considers that compliance with this provision will rely on sophisticated modelling and an understanding of the relative N load to water of the nutrient user group compared to all other load sources, including hydrological flows and an understanding of the attenuation factors, and an understanding of the time frames which will give rise to a risk of exceeding any one of the values in the Tables 15B (c) (d) (e) and (f) at each of the specified locations.</p> <p>While no submission is found which provides a solution, regrettably no submission was found which directly states that it seeks delete 15B.5.10 (3).</p> <p>Forest &amp; Bird (Submitter ID 52265) in its original submission expressed similar concerns about inability to implement the conditions, except that it referred to 15B.5.10 in its entirety, and sought deletion of the Rule 15B.5.10 in its entirety.</p> <p>An alternative approach, if process allows for it, is to amend Rule 15B.5.10 in recognition that Schedule 27 provides a mechanism for <i>“Assessment of On-land Nitrogen Load”</i>, which could be used to estimate the potential to in-river or in-lake loads listed in Table 15B (f), if attenuation is known or can be estimated. This approach would require deletion of reference to Table 15B (c), (d) and (e) within Rule 15B.5.10 (3).</p> <p>If process does not permit this amendment, FANZ considers a choice is required between:</p> <ul style="list-style-type: none"> <li>a) producing a rule in the Plan Change which, in FANZ and Forest &amp; Bird’s view cannot be implemented and enforced, or</li> <li>b) as recommended by Forest &amp; Bird, delete Rule 15B.5.10 in its entirety.</li> </ul> <p>On balance:</p>			

	FANZ preference rest with the alternative approach to recognise the Schedule 27 process as it applies to the Waitaki sub-region and delete reference to Tables 15B (c) (d) and (e) within 15B.5.10 (3).
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Sect 15b P 4-11	Policy 15B.4.23			Delete Policy 15B.4.23, or in the alternative, Amend Policy 15B.4.23 to shift the onus back to regional and district council to identify areas of significant indigenous biodiversity.
Sect 15B P 4-22	Rule 15B.5.20			Amend Rule 15B.5.20 to shift the onus back to regional and district council to identify areas of significant indigenous biodiversity.

RESPONSE	<p>From other submissions:</p> <p>Wolds Station (Submitter ID 67151) seeks deletion of policy 15.4.23.</p> <p>Amendments which would move the onus back to regional and district council to identify areas of significant indigenous biodiversity include the original submission by Dairy NZ (Submitter ID 52271) and Federated Farmers (Submitter ID 67199) which sought to delete Rule 15B.5.20 (3).</p> <p>The Officer report Paragraph 22.19 acknowledges FANZ submission on Policy 15B.4.23, but does not address it specifically The Officer report Paragraph 22.31 and 22.32 identifies that under the RPS:</p> <p><i>...Council and territorial authorities share responsibility for specifying objectives, policies and methods for the control of the use of land in the beds of rivers and lakes and in wetlands for maintenance of indigenous biological diversity only where:</i></p> <p><i>a. a territorial authority has identified in a district plan an area of significant indigenous vegetation or a significant habitat of indigenous fauna, that includes a bed of a river or lake or a wetland; or</i></p> <p><i>b. there are indigenous vegetation clearance provisions in a district plan that apply to an area of the district that includes a bed of a river or lake, or a wetland.</i></p> <p><i>Except as provided for above, the RPS states that the responsibility for specifying objectives, policies and methods for the control of the use of land for maintenance of indigenous biological diversity rests with the Council in respect of land in the coastal marine area, in the beds of lakes and rivers and in wetlands. Control rests with territorial authorities in respect of land outside of these areas.</i></p>			
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	<p>The Officer report recommends retaining the policy and rule but with amendments strengthening them.</p> <p>Of the submissions identified, FANZ preference lies with DairyNZ and Federated Farmers for deletion of Rule 15B.5.20(3).</p>
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Sect 15B P 4-29	Rule 15B.5.35	Support in part		Retain Rule 15B.5.35, but clarify the term 'agricultural nitrogen load limit', in reference to Schedule 27, Part C, because this term does not feature in this Schedule.
RESPONSE	<p>It is noted that Table 15B (f) refers to "nitrogen load limits" which are in-river or in-lake limits after attenuation. The Plan change refers throughout to "<i>Agricultural nitrogen load limit calculated in accordance with Schedule 27</i>" where Schedule 27 refers to "<i>on-land nitrogen load</i>" or "<i>land based nitrogen load</i>". FANZ considers that consistency in terms is desirable.</p> <p>FANZ original submission included the comment:  <i>"For clarity it should be identified that 'agricultural nitrogen load limit' referred to in Rule 15B.5.35 is the same as the 'land based nitrogen load limit' referred to in Schedule 27 Part C."</i></p> <p>FANZ original submission is supported, such that where ever it appears in the Proposed Plan Change, the term "<i>Agricultural nitrogen load limit calculated in accordance with Schedule 27</i>" is amended to "<i>land based nitrogen load limit calculate in accordance with Schedule 27</i>".</p>			

Sect 15B P 4-37 to P 4-44	Tables 15B(a) to 15B(j)			Retain tables 15B(a) to 15B(j), subject to further scrutiny.
RESPONSE	<p>FANZ is guided by the specialist advice and recommendations on Tables 15B (a) through to 15B (j) submitted by the water quality specialists representing DairyNZ. Having reviewed written submissions, FANZ supports the specific amendments in the original submission and in the Hearing evidence presented by Dairy NZ.</p>			

**Concluding Comment:**

Thank you very much for the privilege of additional time to respond to questions presented in the Hearing. I hope this additional information is of assistance.

A handwritten signature in black ink, appearing to read "G. Sneath".

Greg Sneath

Executive Manager

Fertiliser Association of New Zealand

End.