IN THE MATTER OF

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

AND

Submissions and Further Submissions in relation to proposed Variation 1 to the proposed Canterbury Land and Water Regional Plan.

AND

North Canterbury Province of Federated Farmers of New Zealand

A Submitter and Further Submitter

Legal Submissions of Counsel for North Canterbury Province of Federated Farmers

Dated 15 September 2014

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MAY IT PLEASE THE COMMISSIONERS

INTRODUCTION

1. Federated Farmers of New Zealand is a voluntary organisation which advocates for the interests of farming and farmers in all areas of central and local government policy and regulation from free trade to health and safety. Membership is divided into seven farm interest groups: meat and fibre; grains and seeds; dairy; sharemilkers; high country; bees; goats; and rural butchers. Seventy-five percent of registered farms in New Zealand belong to Federated Farmers of New Zealand. Membership is by farm not individual. In addition Federated Farmers offers supporters memberships and membership categories for farm managers/workers.

2. The organisation is divided into 24 provinces of which North Canterbury is the second largest with approximately 1200 farm memberships. The Selwyn Waihora catchment falls within the province of North Canterbury and has approximately 319 farm memberships. The North Canterbury Province of Federated Farmers of New Zealand (Federated Farmers), is a submitter and further submitter in relation to Variation 1 to the proposed Canterbury Land and Water Plan (the proposed Plan).

EVIDENCE

3. Federated Farmers is calling four expert witnesses at this hearing, who have filed statements of evidence in advance. In addition, a number of lay witnesses will also be called to provide evidence as to how Variation 1 is likely to affect themselves and their farming operation. Some of these lay witnesses have filed submissions in their own right. The expert witnesses, and a brief overview of what their evidence covers, are;

4. Dr L Hume. A soil and plant scientist, with particular expertise in relation to irrigation matters and nutrient discharges. His evidence discusses potential environmental impacts of farming, soil and water availability to plants, importance or reliability of water supply, fluctuation in nitrogen discharge from soils in response to climatic variations, the nature of Canterbury soils and its relevance for N discharge allowance, and the matrix of good management project. Dr Hume has prepared E1/C and rebuttal.
5. Dr M Pangborn. Dr Pangborn holds academic qualifications in dairy production, and agricultural management from NZ and overseas universities. He lectures at Lincoln University, and also farms in the Selwyn Waihora catchment. He discusses in broad terms the intensification or de-intensification options available for addressing nitrogen discharge issues in particular, and describes the economic implications for dairy farm businesses, and the rural sector more generally. He also discusses some of the more intangible potential social consequences arising from Variation 1.

6. Dr R Williams. Dr Williams is the General Manager of Science (Sustainable Production) for Plant and Food Research, a Crown Research Institute. In his evidence he summarises the Matrix of Good management project, and the further information of relevance to managing farmlands to minimise N and P losses that this is expected to deliver.

7. Mr M Bennett. Mr Bennett has qualifications and experience in both planning and agriculture. Mr Bennett provides a planning assessment of Variation 1, while also drawing on his agricultural advisory experience. His evidences addresses the introductory section and vision for the catchment, the management framework for managing water quality, in particular nitrogen loss, the nitrogen baseline, and the use of farm environment plans, farming within the cultural landscape/values management area, and the provisions for managing water allocation and transfers in the catchment. Mr Bennett has prepared EIC and rebuttal.

OVERALL POSITION ON VARIATION 1

8. Federated Farmers supports the need to manage the effects of land uses on freshwater where those uses are causing adverse effects. Its members live alongside and enjoy the freshwater resources of the Selwyn Waihora catchment and many rely on its aquifers for drinking and stock water as well as irrigation.

9. Federated Farmers is also aware of the requirement under the National Policy Statement for Freshwater Management (NPS FM 2014) for regional councils to identify water quality outcomes for catchments and to set limits for water quality and abstraction to ensure those outcomes are met. Federated Farmers also acknowledges, in the Canterbury context, the vision and principles of the Canterbury Water Management Strategy. As its members live in, observe and work within the natural environment on a daily basis, and depend on natural resources for their economic prosperity, their affinity to, appreciation
of and reliance on the natural environment is as strong if not stronger than any other community group.

10. In considering Variation 1, or any other regional plan prepared under the Resource Management Act (the Act)\(^1\), Federated Farmers considers the following outcomes are necessary to both achieve the purpose of the Act and to accord with its environmental effects-based philosophy:

- Water quality outcomes must be set that achieve the purpose of the Act and the NPS FM 2014 using robust information, in the timeframes and following the processes contemplated in the NPS, and having regard to environmental, social, cultural and economic matters.

- Any regulation must relate to the functions of the council under the Act and be based on established, clear cause and effect relationships.

- Variation 1 should be regulating land uses which affect water quality, not regulating farming per se. Not all farming affects water quality and certainly not to the same degree.

- The more an activity contributes to the water quality issue, the more the regulatory regime should require. For example, where Variation 1 is managing the discharge of nitrogen-nitrates (N) a person should not be ‘better off’ for having a high N loss footprint than a low one.

11. Any regulations must be consistent between those activities having the same or similar effects:

- All land uses which discharge N need to be managed in Selwyn Te Waihora not just farming.

- Reductions in N loss should be based on how much N an activity is losing (with adjustments for natural variants such as soil type and rainfall).

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\(^1\) The Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 applies the provisions of the Resource Management Act 1991, as far as they are relevant, and except as expressly provided otherwise, to any proposed regional plan. Accordingly, unless otherwise stated, a reference in these submissions to ‘the Act’ is a reference to the RMA.
• If the ability to increase N loss is capped that limit should apply consistently. There should not be rules that allow some dryland farmers to uptake irrigation and increase N loss but not others.

12. Any regulation should be clear and certain for all parties to understand so they can participate in the planning process in a meaningful way. A N reduction regime which is based on percentage reductions from N loss numbers that haven’t yet been established is not clear or certain.

**Water Quality**

13. Federated Farmers is supportive of catchment limits for water quality, both for Te Waihora and its tributaries and for groundwater. The catchment limits in Variation 1 have been developed relying on estimates of N loss from land uses which Environment Canterbury removed from Variation 1 prior to notification on the basis that those numbers were not robust and could not be used for planning purposes.

14. Federated Farmers recognises that Variation 1 will need to manage the conversion of land uses from low to high N loss and include a regime to require reductions from high N loss activities to sustainably manage freshwater resources in this catchment. However it considers changes need to be made to the proposed N loss regime in Variation 1.

15. Federated Farmers supports a minimum threshold for N loss before the regulatory regime ‘kicks in’ (15kg/ha/yr) but seeks that that figure is tailored to soil type in recognition of the impact soil type and rainfall has on inherent N loss regardless of land use. This would give greater flexibility to enable dry-land farming on light and very light soils and make the provision consistent with the approach being taken to N reduction in the MGM project and in other catchments. It does not necessarily result in a higher catchment load – not all farmers in the catchment will lose N up to the 15 or 20kg threshold. Many will be well under it. N loss is not a precise science and the trend that needs to be managed is the shift from relatively low N loss activity to a relatively high N loss activity on a given soil type – not requiring a dryland farmer on a light soil to reduce their N loss because they come in at 17kg/ha/yr rather than 15 – when other land uses on those soils are losing N at several times the magnitude.
16. Above 15kg/ha/yr the N reduction rules start from estimates of current land use and current loss, but provision has to be made for increased N loss with the uptake of Central Plains Water so Variation 1 has a separate regime for the scheme. This creates an iniquitous situation; farmers who are discharging more than 15kgN/ha/yr cannot have any increase, and will be required to make reductions in 2017 and again in 2022, unless they are a shareholder in CPW in which case they can have an increase.

17. The proposed N reduction regime in Variation 1 is uncertain. Farmers are required to establish a nitrogen baseline for their land use based on average N losses over four years of retrospective land use. Then by 2017 they have to meet a new N loss number derived from adopting good management practices and a further percentage reduction on top of that by 2022 – but those 2017 N loss targets are not quantified. This is very uncertain for any farmer to know what their N loss target should be by 2017, whether they can comply with that or the 2022 further reductions, and what the impacts will be.

18. There are also difficulties with the definition of ‘nitrogen baseline’, its method of calculation as an average, and application as a maximum. This will mean that continuation of existing farming activities will at times exceed the nitrogen baseline, thereby becoming a ‘prohibited activity’.

19. Provision must also be made to ensure existing high N loss activities can adjust to new requirements. These land uses are lawfully established and, if they got a water permit after 2004, the potential effects of N loss on water quality will have been assessed by Environment Canterbury. Federated Farmer’s position is that a transition period is needed to ensure high N loss activities can adjust to new N loss targets over time.

20. These issues are overcome if Variation 1 focussed on setting appropriate thresholds of N loss by soil types, rainfall and, if appropriate, land uses in the catchment; set those targets for new entrants from the outset and for existing activities to reach over time.

21. This sort of approach is supported by Federated Farmers and several other submitters on Variation 1. However to do this with some confidence further information on reasonable rates of N loss for land uses on different soils types and rainfall areas, which is the focus of the MGM project, will be needed.

Water Quantity
22. Federated Farmers, similarly, does not dispute the need to control abstraction and to provide relief against low flows in lowland streams and springs. Federated Farmers is concerned though that the regulatory regime for water allocation sets a limit which is a gross reduction on current allocation to be achieved when recharge from CPW occurs. This seems very uncertain and begs the question what happens should CPW uptake or recharge not occur as anticipated. Allocation limits set by Variation 1 should achieve the purpose of the Act in light of the current receiving environment. The limits can always be reviewed should conditions in the receiving environment change.

National Policy Statements Freshwater Management

23. Gazetted of the NPS FM 2014 raises a number of practical and legal issues in the context of Variation 1. The Schedule 1 process had commenced, and submissions and further submissions had been made, when the NPS FM 2014 came into effect (on 1 August 2014).

24. In terms of the Variation 1 process, it is submitted that;

25. The NPS FM 2011 continues to have legal effect, notwithstanding that it has been superseded by the NPS FM 2014.² It is noted that Variation 1 states that it sets out the catchment’s ‘freshwater objectives’ in accordance with the NPS FM 2011.³

26. Other than in particular, but limited, ways Variation 1 cannot give effect to, or implement the NPS FM 2014. This is because, unless it expressly provides otherwise, the NPS FM 2014 requires the process in Schedule 1 of the Act to be applied in changing a regional plan to implement the NPS FM 2014.

27. The express exception in NPS FM 2014, are policies A4 and B7, which direct changes to be made without recourse to the Schedule 1 process. These changes can, and should, be directly made to the proposed Plan, and must apply equally to the Selwyn Waihora catchment, as well as other catchments in the region.

² The MfE website notes that the NPS FM 2011 continues to apply until regional councils establish and set limits for freshwater in their regional plans as directed in NPS FM 2014. See www.mfe.govt.nz/rma/central/nps/freshwater-management.html
³ Page 4 – 3.
28. Consideration of policies and methods proposed to be introduced by Variation 1 should recognise that policies A4 and B7 of NPS FM 2014 will be included within the proposed Plan, and will provide policy guidance within the Selwyn Waihora catchment in relation to the matters of primary concern to Variation 1.

29. It would be inappropriate to make further changes (other than inclusion of policies A4 and B7) to implement the NPS FM 2014, because NPS FM 2014 specifically envisages that other changes to regional plans to implement the NPS FM 2014 will be through the Schedule 1 process. In the context of Variation 1, because the NPS FM 2014 was not gazetted, or operative, at the time Variation 1 was notified, and submissions closed, submitters have been precluded from considering, or submitting on its interpretation or application in the context of the Selwyn Waihora catchment.

30. A further plan change, in future, will likely be required to implement the requirements of NPS FM 2014. That will have the benefit of further information (MGM). In the interim, policies A4 and B7 implement the requirements of NPS FM 2014. There is no requirement for the other parts of the NPS FM 2014 to be implemented immediately. Rather, implementation is required to be as promptly as is reasonable in the circumstances, with full implementation by 2025, or 2030 if extended. This timeframe acknowledges the requirement to comply with the Schedule 1 process to implement the requirements of the NPS FM 2014, except where the NPS itself expressly provides otherwise. To do otherwise would be symptomatic of trying to do too much, too soon, with too little information.

31. The NPS FM 2014 expressly states that "where changes in community behaviours are required, adjustment timeframes should be decided based on the economic effects that result from the speed of change." This statement underscores and emphasises the need for careful consideration of economic consequences of any decision to phase out over allocation (in terms of water quality or quantity) to implement NPS FM 2014, through Variation 1. This is confirmed, and should be read in the context of the emphasis placed on economic considerations in recent amendments to s 32.

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4 See introductory words to policy A4 and B7. See also s 55(2C) RMA. See also MfE website (supra) "Regional Councils must amend their regional policy statements and regional plans to give effect to all other objectives and policies in the NPS as soon as practicable, using the Schedule 1 process."

5 NPS FM 2014, pg 4.
32. As noted above, the NPS FM 2011 continues to have effect, notwithstanding the gazetted of the NPS FM 2014. To the extent that the requirements of the NPS FM 2011 are carried over and restated in NPS FM 2014, then these requirements can be given effect to through Variation 1, given the application of the Schedule 1 process.⁶

33. Federated Farmers expressly acknowledges the NPS FM 2011, and 2014, and considers that the relief sought in its submission would not undermine the ability of Variation 1 to meet the relevant requirements of either NPS. Furthermore, the implementation timeframe in the NPS FM 2014, and the requirements of the Schedule 1 process, emphasise the importance of having available robust information, and that future plan changes are likely to be required.

FIRST PRINCIPLES

34. The purpose of the preparation, implementation and administration of a regional plan, is to assist a regional council to carry out its functions in order to achieve the purpose of the Resource Management Act 1991 (the Act).⁷

35. Additionally, and importantly in the context of Canterbury, Environment Canterbury must also have particular regard to the vision and principles of the Canterbury Water Management Strategy.⁸

36. The purpose of the Act is, of course, to promote the sustainable management of natural and physical resources.

37. I emphasise the word ‘physical’. In the context of Variation 1, the ‘physical resources’ of the Selwyn Waihora catchment include the farming properties, farming infrastructure, and farming improvements present in the catchment, which have been developed by past and present generations. These physical resources, are themselves built upon, or rely upon, the natural resources of the catchment, in particular its land, soils and water.

⁶ While also acknowledging that Schedule 1 of the Act is amended, as it applies in Canterbury, by the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010.
⁷ S 63(1) RMA.
⁸ S 63 Environment Canterbury (Temporary Commissioners and Improved Water Management Act 2010.
38. That the Act requires the physical resources, as well as the natural resources of the catchment, to be sustainably managed is underscored by s 5(2), and its references to enabling people and communities to provide for their social, economic and cultural wellbeing, and sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations. That land and soils of farming utility are a resource which must be sustainably managed under the Act, is well established.

39. There is long-standing recognition, in New Zealand planning law, as to the importance of the sustainable management, and prior to the passage of the RMA, the wise use, of soil resources capable of use for food production.

40. The Town and Country Planning Act 1953 required, at s 3, that "every regional planning scheme shall have for its general purpose the conservation and economic development of the region to which it relates by means of the classification of the lands comprised therein for the purposes for which they are best suited by nature or for which they can best be adapted ..." (emphasis added).

41. In 1973, the Town and Country Planning Amendment Act, then introduced a new section 2B into the 1953 Act. The new section 2B introduced matters declared to be of national importance, one of which was "the avoidance of encroachment of urban development on, and protection of, land having a high actual or potential value for the production of food." (emphasis added).

42. The Town and Country Planning Act 1977 replaced the 1953 statute. It retained, in s 3, the contents of the old s 2B relating to land having high potential value for food production, and declared it, and other matters, to be "of national importance" to be "recognised and provided for".

43. The relevant legal landscape then changed dramatically with the enactment of the Resource Management Act 1991. While express reference to the national importance of soils of potential value for food production does not feature in s6, or Part 2 of the Act, it has been recognised that the Act continues to provide for the sustainable management of such resources.

44. For example, in *Canterbury RC v Selwyn DC* (1996) 2 ELRNZ 395, when considering the effect of urban expansion onto food producing soils of the Selwyn District, the Court observed;
"... the RMA does not refer to versatile soils or land, but uses the more generic expression "resource". Soil is mentioned in s 5, but without the expression "versatile". Whatever may be the argument, it is perfectly clear to us that the resource represented by versatile soils, at this stage of scientific knowledge, can be regarded as an important resource for the well-being and survival of future generations, and its protection is a matter for a Regional Council to decide upon if they consider it a matter of regional significance."

45. And further

"The submissions that the sustainable management concept should not be seen in terms of supporting the economic lifestyle of farmers (that is primary production), to us is taking a slightly myopic view of the Act. In New Zealand primary production is part of the integrated community and has an important, although not primary, place within it. In saying that, we accept that the reference in s 5 to the life supporting capacity of soil does not mean, necessarily, the protection of those soils for the provision of food for human beings."

46. While private property rights are subject to the sustainable management purpose of the Act11, it is submitted that the sustainable management of natural and physical resources in both public and private ownership must nevertheless be provided for under this Variation.

47. A recurring theme of these submissions, is that enabling the sustainable management of the farming properties, and farming related infrastructure and improvements which are physical resources of the catchment, as well as the sustainable management of the natural resources of the catchment, will be essential in order for Variation 1 to achieve the purpose of the Act. This is particularly so given the vision expressed in the Variation, being "to restore the mauri of Waikura while maintaining the prosperous land-based economy and thriving communities."

48. As the Environment Court observed in Canterbury RC v Selwyn DC;

"... we agree with Mr Hearn where he says s5 provides for the protection of resources for human beings as well as protection of the environment from human beings."

49. It is acknowledged that the Act is concerned with community economic wellbeing, rather than protecting private business interests. As the Environment Court observed in Westfield NZ Ltd v Wellington Regional Council W44/2001;

"The question of economic wellbeing does not mean protecting private business interests.

The Tribunal in Imrie Family Trust14 at pg 463 stated:

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11 Falkner v Gisborne DC AP1/95 H Ct
12 The vision is further discussed in these submissions at para 56 onwards.
“Although we need to consider the economic effects of a proposal on the environment, it is only to the extent that they affect the community at large, not the effects on the expectation of individual investors.”

50. In the present context, the economic wellbeing of the rural community as a whole is inextricably linked to the sustainable management of existing farming resources and infrastructure, and farm properties, and their continued ability to be utilised for reasonable farming purposes. It is submitted that in this context, the impact of Variation 1 on farming businesses within the Selwyn Waikouaiti catchment is relevant, and must be taken into consideration. An analogy can again be drawn from retail trade cases;

“Economic effects certainly have to be taken into consideration, … that is to enable people and communities to provide for their social, economic and cultural wellbeing and for their health and safety. The economic welfare of individual businesses is relevant only in that context.”\(^\text{15}\)

51. Striking the right balance between the use, development and protection of natural and physical resources is, of course, critical. As the Supreme Court has recently confirmed in Environmental Defence Society Inc \textit{vs} NZ King Salmon Ltd, a planning document may give primacy to preservation or protection in particular circumstances.\(^\text{16}\) But that decision also importantly reiterates that “protecting the environment from the adverse effects of use or development is \textit{an aspect} of sustainable management – \textit{not the only aspect, of course}, but an aspect”\(^\text{17}\) (my emphasis).

52. In my submission, recent amendments to s 32 of the Act highlight the importance of aspects of sustainable management in addition to protection of the environment, which also need to be given due consideration in the present context.

53. Assessments under s 32 are now specifically required to assess the benefits and costs of environmental, economic, social and cultural effects that are anticipated from the proposed plan provisions, including the opportunities for economic growth and employment that are anticipated to be provided or reduced, and if practicable quantify those benefits and costs.\(^\text{18}\)

54. It is submitted that in some respects, the s 32 analysis prepared in relation to Variation 1, has fallen short of these requirements.

\(^{14}\) \textit{Imrie Family Trust v Whangarei District Council} (1994) NZRMA 70
\(^{15}\) Foodstuffs Ltd \textit{v} Dunedin CC W53/93 (Dunedin City Plan Change 6 references).
\(^{16}\) See \textit{Environmental Defence Society Inc v NZ King Salmon Ltd} [2014] NZSC 38. At para 149.
\(^{17}\) At para 148.
\(^{18}\) S 32(2) RMA.
PARTICULAR ISSUES

55. In this part of these submissions, I address some of the particular issues which arise out of Federated Farmer’s submission and further submission.

A new objective

56. Federated Farmers sought, in its submission on Variation 1, the inclusion of a new objective as follows;

“...The mauri of Te Waihora and its tributaries is restored while maintaining a prosperous land-based economy and thriving communities in the Selwyn-Te Waihora catchment.”

57. This proposed new objective reflects the vision for the catchment, expressed in the introduction to the Variation.

“...restore the mauri of Te Waihora while maintaining the prosperous land-based economy and thriving communities.”

58. The introduction goes on to explain that a package “...to achieve the vision ...” has been identified through a collaborative process with the Selwyn Te Waihora Zone Committee, and that “this sub-regional section comprises the regulatory actions” to achieve the vision.

59. Federated Farmers supports the vision, but submits that it is desirable and appropriate that it be expressed as an objective in the proposed Plan.

60. The functions of Regional Council’s under the Act include;

30 Functions of regional councils under this Act
(1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:
(a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region;
(b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:

61. And, as noted earlier, s 63(1) provides;

63 Purpose of regional plans
(1) The purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out any of its functions in order to achieve the purpose of this Act.

62. Within Canterbury, the vision and principles set out in the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 must also be given particular regard. It is submitted that in this context, the relevant question to ask is whether expression of the Vision, as an objective in the proposed Plan, would assist in giving effect to the purpose of the Act, while having particular regard to the vision and principles set out in the EC(TCIWM)Act, within the Selwyn Waihora catchment, and wider Region.

63. Section 32(1) of the Act further relevantly provides;

32 Requirements for preparing and publishing evaluation reports
    (1) An evaluation report required under this Act must—
        (a) examine the extent to which the objectives of the proposal being evaluated are the
            most appropriate way to achieve the purpose of this Act; and

64. So another way of looking at this issue, this time through the lens of s 32, is to consider whether expressing the Vision, as an objective in the proposed Plan, is the most appropriate way to achieve the purpose of the Act?

65. A regional plan must state

67 Contents of regional plans
    (1) A regional plan must state—
        (a) the objectives for the region; and
        (b) the policies to implement the objectives; and
        (c) the rules (if any) to implement the policies.

66. Section 67 goes on to provide for what a regional plan may state.

(2) A regional plan may state—
        (a) the issues that the plan seeks to address; and
        (b) the methods, other than rules, for implementing the policies for the region; and
        (c) the principal reasons for adopting the policies and methods; and
        (d) the environmental results expected from the policies and methods; and
        (e) the procedures for monitoring the efficiency and effectiveness of the policies and methods; and
        (f) the processes for dealing with issues—
            (i) that cross local authority boundaries; or
            (ii) that arise between territorial authorities; or
            (iii) that arise between regions; and
        (g) the information to be included with an application for a resource consent; and
(h) any other information required for the purpose of the regional council’s functions, powers, and duties under this Act.

67. So, a regional plan must state the objectives for the region, but there is no reference to a ‘vision’ amongst the matters which a regional plan may state.

68. It is submitted that it is clear from the Variation 1 document, that the vision has been treated, as if it is an objective. In particular, the regulatory actions set out in the Variation are those that have been identified to achieve the vision. Yet, as s 32(1) provides, the provisions (including regulatory actions) of the Variation need to be assessed in terms of their appropriateness as a means of achieving the objectives of the Variation and proposed Plan.

69. It is submitted that the vision is, for all intents and purposes, an objective. It has been treated effectively as such in the development of Variation 1. The Vision is the Objective which the wider provisions of Variation 1 aim to achieve.

70. In these circumstances, failing to express the Vision as an Objective makes no sense. In particular, it does not assist in achieving the purpose of the Act. Furthermore, it undermines the policies and rules introduced by Variation 1, which must be “the most appropriate way to achieve the objective(s)”, and which are identified in the Variation document as part of a package “to achieve the vision”.

71. The s 42A Report comments, at para 9.40,

While an objective may give greater emphasis to the specific outcomes for this sub-regional area, the structure of the pLWRP has been deliberately set up to rely on the region-wide objectives and strategic policies. This is clearly stated in Policy 4.10:

4.10 Reviews of sub-regional section will not make any changes to the Objectives or Policies 4.1 – 4.10 of this Plan, except that catchment-specific outcomes and limits may be developed to implement the objectives and policies of this Plan.

On this basis, no additional objective, specific to this sub-regional section of the pLWRP is recommended.

72. Accordingly, it is apparent that the s 42A report writers did not give consideration to the merits of including a new objective as sought by Federated Farmers, rather they took the view that they were constrained by Policy 4.10 such that the objective sought could not be included in the variation, or proposed Plan.

19 Page 4-3, Proposed Variation 1 to the Proposed Canterbury Land and Water Plan
73. Putting to one side the question of whether, as a matter of law, a policy can fetter the ability to subsequently change a planning document through a variation or plan change process\(^{20}\), it is submitted that the approach of the s 42A report writers on this point is in error, and misinterprets the relief being sought by Federated Farmers.

74. First, the expression of the vision, as an objective, is a "catchment-specific outcome" which "implement[s] the [wider] objectives and policies of this Plan" in the context of the Selwyn Waihora catchment. As such, it is precisely the type of specific, additional objective which policy 4.10 contemplates.

75. Second, in any event, Policy 4.10 purports to preclude "changes to the Objectives or Policies 4.1 – 4.10". Federated Farmers is not seeking any changes to Objectives or Policies 4.1 – 4.10. Rather it is seeking the introduction of a new, or additional, Objective with a catchment specific focus. A new objective, is separate from, and different to, a change to an existing objective.

76. In this respect, it is noted that Variation 1, of course, introduces a raft of new policies "that apply in the Selwyn Waihora Sub-regional area, in addition to those set out in Section 4 of this Plan."\(^{21}\) In light of the introduction of these new, additional catchment specific policies, it is submitted that Policy 4.10 is being interpreted inconsistently by the authors of the s 42A report. If, as a matter of law, Policy 4.10 prevents, as the authors claim, the introduction of an additional, catchment specific Objective, then it must, logically, also prevent the introduction of the additional, catchment specific Policies proposed to be introduced by Variation 1.

77. Not specifying the Vision as an objective may lead to unfortunate consequences. Is it clear how the catchment specific policies achieve the region wide objectives, given that the variation itself says they are "the regulatory actions" to "achieve the vision"? In any future plan change, will the Vision have any relevance, when the policies and rules are considered? What, if any, is the relevance of the Vision, in assessment of non-complying activities (such as those created by rule 11.5.11)? As the policies and rules are actions to achieve the Vision, it is submitted that, as a matter of law, assessment, under s 104D of the Act, of non-complying activities created by Variation 1 should involve consideration of whether the proposed activity will be contrary to the Vision, expressed as an objective.

\(^{20}\) Federated Farmers expressly reserves its position on this point of law.

\(^{21}\) See Variation 1 document, pgs 4-5.
78. In summary on this point it is submitted that;

79. Policy 4.10 does not prevent the introduction of a new Objective, consistent with the Vision expressed for the Selwyn Te Waihora catchment.

80. The policies and rules set out in Variation 1 are expressed to be part of a package to achieve the Vision.

81. The provisions (including Policies and Rules) of the Variation are required to be the most appropriate way to achieve the Objectives in the plan.

82. In these circumstances, the Vision should be expressed as an Objective, and doing so would assist in achieving the integrated sustainable management of natural and physical resources within the Selwyn Waihora sub region which is the subject of this Variation.

Nitrogen reduction regime

83. Issues discussed in relation to the proposed nitrogen reduction regime are interrelated. The concerns of Federated Farmers relate in particular, to the nitrogen baseline definition and how it is calculated and applied, the default to prohibited activity status for farming activities which do not meet the nitrogen baseline, the nitrogen threshold of 15kg/ha/yr across all soil types, and the uncertainty for farmers that arises as a consequence of a reduction regime which is based on percentage reductions from N loss numbers that have not yet been established. While these issues relate to different provisions within Variation 1, the effect of the provisions on farming activities needs to be considered both as individual provisions, and in the context of the changes proposed by Variation 1 to the proposed Plan as a whole.

"Nitrogen baseline" Definition.

84. The proposed Plan defines nitrogen baseline at 2.10 as

(a) the discharge of nitrogen below the root zone, as modelled with OVERSEER, or equivalent model approved by the Chief Executive of
Environment Canterbury, averaged over the period of 01 July 2009 – 30 June 2013, and expressed in kg per hectare per annum, except in relation to Rules 5.46 and 5.62, where it is expressed as a total kg per annum from the identified area of land; and
(b) in the case where a building consent and effluent discharge consent have been granted for a new or upgraded dairy milking shed in the period 01 July 2009 – 30 June 2013, the calculation under (a) will be on the basis that the dairy farming activity is operational; and
(c) if OVERSEER is updated, the most recent version is to be used to recalculate the nitrogen baseline using the same input data for the period 01 July 2009 – 30 June 2013.

85. The submission of Federated Farmers seeks amendment to this definition, in so far as it applies to the Selwyn Te Waihora catchment.

86. The s 42A report notes that;

“Some submitters ... have sought to make changes to the region wide definition ‘nitrogen baseline’ definition (sic). Again it is considered that changes to region wide definitions is (sic) outside the scope of Variation 1.”²²

87. It is submitted that changes to the definition of ‘nitrogen baseline’ as it is to be applied within the Selwyn Te Waihora catchment are within scope of Variation 1. The definition is referred to in a number of rules, and policy 11.4.12 introduced by Variation 1. These rules, and policy, change how the definition is applied and used in the catchment. Importantly, the submission of Federated Farmers is not seeking, through Variation 1, changes to the definition of ‘nitrogen baseline’ as it applies outside the Selwyn Waihora catchment.

88. Federated Farmers submission on this point, is inextricably linked with how the Variation proposes that the “nitrogen baseline” definition should be implemented through the proposed rules.

Prohibited Activity Status

89. Proposed rule 11.5.12 provides that;

The use of land for a farming activity or farming enterprise that does not comply with conditions 2 of Rule 11.5.7, condition 3 of rule 11.5.9, or condition 2 of rule 11.5.10 is a prohibited activity.

²² At para 7.166
90. The conditions referred to in 11.5.12 essentially relate to increases in nitrogen loss calculation for farming properties above the nitrogen baseline.

91. The effect of the proposed Rule, would be that the use of land for a farming activity, or farming enterprise, within the Selwyn Waihora catchment, where the nitrogen loss calculation for the property is above the nitrogen baseline, would be a prohibited activity.

92. While rules 11.5.7, and 11.5.9 have transitional mechanisms built into them (in that they only come into effect on 1 January 2017), rule 11.5.10 does not. The effect would appear to be to render farming activities which exceed the nitrogen baseline a prohibited activity, from the date that Variation 1, and the proposed Plan, become operative.

93. Federated Farmers concern here is that, given the way the nitrogen baseline was calculated as an average, specifying it as an absolute maximum will mean that lawfully established, or approved farming activities will, on occasion, be likely to be discharging outside their baseline. This may be the case even where there has been no change in farming activity on the relevant property, from that undertaken during the baseline period. That the Variation proposes that farming above the nitrogen baseline be a prohibited activity, only compounds the concern on this point.

94. First, I need to go back to the definition of “nitrogen baseline”, and explain how a farming activity undertaken consistently with the activity undertaken during the period of calculation of the nitrogen baseline, can nevertheless exceed that baseline.

95. The evidence of Dr Hume explains that nitrogen discharge is not a constant. It fluctuates between years, and in particular with rainfall. Accordingly, the nitrogen baseline, calculated as it is as an average across four years (2009 – 2013), reflects an averaging of discharge rates, as influenced by climatic conditions which prevailed across those four years. But climatic conditions are not constant, and in a future year, a farmer might still be farming in precisely the same manner as during the baseline period, yet the nitrogen discharges from his or her property might be greater than the averaged ‘baseline’. The farming activity has remained constant, but the climatic inputs (beyond the farmers control) have altered, and as a consequence, the nitrogen discharge may now exceed the calculated nitrogen baseline.

23 See EIC of Dr Hume, at para 22.
96. These variabilities are graphically illustrated in the attachment at footnote 2 of Dr Hume’s evidence\(^{24}\). This illustrates that in Canterbury annual rainfall can vary by as much as threefold in extreme years.

97. Simple maths illustrates the point. The average of, for example, 3, 6, 4 and 7, is 5. Yet, if the figures represent nutrient discharges from a property per year, then in two of the years the average was exceeded.

98. The evidence of Mr Bennett describes how the nitrogen baseline definition also fails to recognise land and irrigation development which has occurred during or after the baseline period. Ministry for Primary Industry documents indicate that one third of Canterbury arable farms undertook some form of irrigation development during a single year in the baseline period.\(^{25}\)

99. To the extent that rule 11.5.12 is intended to, or will have the effect, of transforming lawfully established and operating farming activities or enterprises into prohibited activities, it is submitted that it is inappropriate, unjustified, and contrary to the scheme and purpose of the Act.

100. The Court of Appeal considered the circumstances in which describing activities as ‘prohibited’ in a district or regional plan was appropriate in *Coromandel Watchdog of Hauraki Inc v Ministry of Economic Development CA 285/05*\(^{26}\). The Court found that;

> “… if a local authority has sufficient information to undertake the evaluation of an activity which is to be dealt with in its district plan at the time the plan is being formulated, it is not appropriate use of the prohibited activity classification to defer the undertaking of the evaluation required by the Act until a particular application to undertake the activity occurs. That can be contrasted with the precautionary approach, where the local authority forms the view that it has insufficient information about an aspect of an activity, but further information may become available during the term of the plan.”

101. In my submission, Variation 1, and rule 11.5.12 in particular, is an example of the former, rather than the latter, of the two circumstances described by the Court of Appeal. Because of the way the 'nitrogen baseline' has been defined, rule 11.5.12 will capture, and render prohibited, some existing farming activities, even where they have not changed from the activities undertaken during the baseline period of 2009 – 2013. It is submitted that Council currently has sufficient information to assess the effects of N

\(^{24}\) Refer Annexure 1 to these submissions.
\(^{25}\) Refer Appendix to the EIC of Mr Bennett. Ministry for Primary Industries. Arable Monitoring 2012. Pg 8.
\(^{26}\) *Coromandel Watchdog of Hauraki Inc v Ministry of Economic Development CA 285/05* [2007] NZCA 473.
discharges that would be caused by the continuation of existing farming activities undertaken in the baseline period. The reason they have been rendered ‘prohibited’ relates back to how the nitrogen baseline has been defined as an average across a number of years, but expressed as a maximum in any given year.

102. In my submission, there is no effects based reason as to why the regional council could not, now, assess the effects of consenting applications to continue farming activities undertaken during the baseline period, where those activities maintain the average N discharge level for that property during the baseline period, notwithstanding that they might, from time to time, exceed the baseline in any given year. Accordingly, this is, in my submission an instance where;

"... a council which could have assessed the effects of an activity which was likely to occur in its territory simply chose to give it prohibited activity status to defer the consideration of those effects until a specific proposal came before it."\(^\text{27}\)

103. In the event that the use of prohibited activity status is not found to offend against the findings of the Court of Appeal in \textit{Coromandel Watchdog}, then in my submission that should not be the end of your consideration of this issue. Even if prohibited activity status is a lawfully available method, it does not necessarily follow that it is the most efficient and effective method to give effect to the policies and objectives of relevance to Variation 1. In my submission, it clearly is not.

104. In this respect I note that Policy A4 and B7 of the NPS FM 2014 are required to be included in the proposed Plan, until changes (through the Schedule 1 process) to implement policies in the NPS have become operative. Policies A4 and B7 specifically envisage consideration of the effects of applications. Classifying activities as ‘prohibited’ will not give effect to such policies.

105. Similarly, a number of regional objectives in the proposed Plan (in the absence of any catchment specific objective) also envisage consideration of the effects of land use activities, and the enabling of economic use while managing adverse effects.\(^\text{28}\) Prohibited activity status does not give effect to such objectives.

\(^{27}\textit{Coromandel Watchdog of Hauraki Inc v Ministry of Economic Development} CA 285/05, at para 40.\)

\(^{28}\)See for example; Objective 3.5, Land uses continue to develop and change in response to socio-economic and community demand; Objective 3.9, Abstracted water is shown to be necessary and reasonable for its intended use and any water that is abstracted is used efficiently; Objective 3.11, Water is recognised as an enabler of the economic and social wellbeing of the region; or Objective 3.23, Soils are healthy and productive, and human induced erosion and contamination are minimised.
106. The evidence of Dr Hume discusses how nitrogen discharge levels cannot simply be 'turned off', like a tap. He notes that N-loss varies according to biophysical factors that are often difficult to control, and which should be recognised in any regulatory regime to manage N loss.²⁹

107. If the effect of the nitrogen baseline definition, and rule 11.5.12 is to render existing farming activities to be prohibited, then it is submitted that there are unfortunate parallels with the creation of the red zone in post-earthquake Christchurch, notwithstanding the very different processes which led to these two outcomes.

108. As the High Court observed in Fowler Developments Ltd v The Chief Executive of the Canterbury Earthquake Recovery Authority (Quake Outcasts) [2013] NZHC 2173.

[63] The RMA governs how property owners may use their land. Section 9 provides a negative definition, that no-one may use land in a manner that contravenes a national standard, or a regional or district rule. Most important in this instance is the district plan, which prescribes conditions for the use and development of residential sections by reference to zoning. The applicants’ land was zoned residential, but subject to different building criteria depending upon the permitted intensity of residential development. The property owners had a right to establish and live in their homes subject to compliance with the plan.

[64] It is the function of the City Council under s 31 of the RMA to manage and control “the effects of the use, development or protection of land and associates natural and physical resources …” In doing so, the Council before bringing down or changing a plan is required to make an evaluation of “alternatives, benefits and costs”. Hence as Elias CJ has stated:

The district plan is key to the (RMA’s) purpose of enabling “people and communities to provide for their social, economic, and cultural well being”. It is arrived at through a participatory process, including through appeal to the Environment Court. People and communities can order their lives under it with some assurance.” (emphasis added)

That was no longer the case in the red zone.”

109. While Fowler was considering the district plan, the Court’s observations, and those of the Chief Justice in Discount Brands which were given emphasis by the High Court, are equally applicable to a regional plan. Farmers in the Selwyn Te Waihora catchment have a right to establish farming enterprises, subject to compliance with the regional plan, just as property owners in urban Christchurch had a right to establish and live in their homes subject to compliance with the district plan. And just as the Christchurch community was entitled to order their lives under the district plan with some assurance, so too is the

²⁹ EIC of Dr Hume, at paragraphs 22 – 23.
farming community of Selwyn Waihora entitled to order their lives under the existing regional plan with some assurance. Consequently, in reliance on the assurance provided by the regional plan, existing land use farming practices have been established. However, the effect of Variation 1, as it is proposed, will be to render some of those existing farming practices unlawful.

110. The scheme of the Act also, it is submitted, suggests that rendering lawfully established activities to be prohibited activities is inappropriate.

111. Section 20A(2) expressly preserves the ability of existing lawful activities to continue operating, despite a rule in a regional plan becoming operative and requiring a resource consent for an activity.

20ACertain existing lawful activities allowed
(1)If, as a result of a rule in a proposed regional plan taking legal effect in accordance with or (8), an activity requires a resource consent, the activity may continue until the rule becomes operative if,—
(a)before the rule took legal effect in accordance with section 86B or 149N(8), the activity—
(i) was a permitted activity or otherwise could have been lawfully carried on without a resource consent; and
(ii) was lawfully established; and
(b) the effects of the activity are the same or similar in character, intensity, and scale to the effects that existed before the rule took legal effect in accordance with section 86B or 149N(8); and
(c) the activity has not been discontinued for a continuous period of more than 6 months (or a longer period fixed by a rule in the proposed regional plan in any particular case or class of case by the regional council that is responsible for the proposed plan) since the rule took legal effect in accordance with section 86Bor 149N(8).
(2)If, as a result of a rule in a regional plan becoming operative, an activity requires a resource consent, the activity may continue after the rule becomes operative if,—
(a) before the rule became operative, the activity—
(i) was a permitted activity or allowed to continue under subsection (1) or otherwise could have been lawfully carried on without a resource consent; and
and
(ii) was lawfully established; and
(b) the effects of the activity are the same or similar in character, intensity, and scale to the effects that existed before the rule became operative; and
(c) the person carrying on the activity has applied for a resource consent from the appropriate consent authority within 6 months after the date the rule became operative and the application has not been decided or any appeals have not been determined.

112. Section 20A(2) envisages that, where permitted activities have been lawfully established, and then become subject to a rule in a regional plan, persons carrying out the activity will be able to apply for a resource consent for those activities.
113. Of course, by describing an activity as a prohibited activity, no application for a resource consent may be made for the activity, and the consent authority must not grant a consent for that activity.\textsuperscript{30}

114. It is also noted that until such time as the rule becomes operative however, an application may be made to carry out the activity, and must be treated as an application for a discretionary activity.\textsuperscript{31}

115. Environment Canterbury has acknowledged that “full compliance with the nitrogen baseline may be challenging.”\textsuperscript{32} Consequently, a staggered, or transitional approach to compliance is being implemented.

116. Furthermore, different types of farming operation are treated differently. Farms that have converted to dairy during the baseline period are able to calculate their nitrogen baseline as if the farm were fully operational at the maximum number of cows specified on their dairy effluent consent. However, for other farming operations that underwent development during the baseline period, such as conversion of dryland sheep or beef to irrigated beef, there is no similar latitude provided. Such an approach is not effects based management, which is central to the RMA. Rather, it is iniquitous, favouring one industry sector over others. As the Environment Court accepted in \textit{Westfield NZ Ltd v Wellington Regional Council}\textsuperscript{33},

> “the role of decision makers [when preparing plans under the Act] is to provide a framework within which the market can operate to find the highest and best use of resources.”

117. In practical terms, the effect will be that (non dairy) farmers who developed their properties ‘\textit{with some assurance}’ under the operative regional plan of the time, will find that operation of those properties exceeds the nitrogen baseline, and is rendered, by rule 11.5.12, to be a prohibited activity. Indeed, even where no development has occurred, the method of calculating the nitrogen baseline as an average, will mean that simply continuing the same farming activity as undertaken during the baseline period, is likely to result in an annual nitrogen discharge above the nitrogen baseline for that property in some years. Again, the effect of rule 11.5.12 is to render continuation of such farming activity prohibited.

\textsuperscript{30} See s 87A(6) RMA.\textsuperscript{31} See s 87B(1)(c).\textsuperscript{32} E Can, Nitrogen Baseline Compliance Note April 2014. Annexure 2 to these legal submissions.\textsuperscript{33} \textit{Westfield NZ Ltd v Upper Hutt CC} EnvC A41/2001 at para 94.
118. The implications are not only economic. Lawfully established activities are being rendered unlawful. The penalties are substantial, up to 2 years imprisonment or a fine not exceeding $300,000 in the case of an individual, and a fine not exceeding $600,000 in the case of a company.\textsuperscript{34}

119. It is submitted that the identified problems with the proposed implementation of the nitrogen baseline are real, and need to be addressed. The submission of Federated Farmers identifies amendments to the definition which can be implemented specifically for the Selwyn Waihora catchment that is the subject of Variation 1.

120. Additionally, it is submitted that rule 11.5.12 should be amended to render non compliance a non complying activity, rather than a prohibited activity.

121. Rule 11.5.11 is closely related to, and accompanies rule 11.5.12. It establishes non complying activity status for activities that do not comply with it. There are parallels between the two rules, in terms of what they are trying to achieve, and how they do so, such that amending rule 11.5.12 to refer to non-complying activity would not undermine the scheme of the Variation.

122. Non-complying activity status would preserve a degree of discretion, albeit only in tightly controlled circumstances. It would allow a farmer whose operation might only just exceed the nitrogen baseline, to at least have the ability to apply for a consent. It would allow a farmer who will on average be within the baseline, but on occasions will also exceed it in any given year, to apply for a consent to enable his or her farming practice to lawfully continue. It would preserve the ability to consider exceptional circumstances, or novel or innovative farming practices, which might offer significant environmental or economic benefits, while nevertheless transgressing to some degree on the nitrogen baseline. It would be an efficient and effective method of giving effect to the region wide objectives which require effects based consideration and decision making while protecting the Selwyn Waihora catchment’s natural values.

123. Obviously, the ability to apply for a non-complying activity consent is no guarantee that it will be granted. Non-complying activity consents are tightly controlled. The

\textsuperscript{34} S 339(1) RMA. The relevant offence would be under s 338(1), being contravention of s 9 of the Act, which provides that no person may use land in a manner that contravenes a regional rule unless expressly allowed by a resource consent ..., except that no resource consent can be granted for a prohibited activity.
adverse effects of the activity must be minor, or the activity must not be contrary to the objectives and policies of the relevant plan or proposed plan.\textsuperscript{35} Notwithstanding that the vision has not been included as an objective, the policies of Variation 1 are highly directional, and give clear guidance for assessment of a non complying activity. The Supreme Court has recently confirmed the appropriateness of directional policies in appropriate circumstances\textsuperscript{36}, which should give some assurance that future decision makers will be required to implement and give effect to those policies when making decisions under them.

\textit{Light and very light soils}

124. A further point which I wish to touch upon regarding nitrogen discharge issues, is in relation to light and very light soils.

125. The effect of proposed rules 11.5.7, 11.5.8 and 11.5.9 is that farming activities which give rise to a nitrogen loss calculation of less than 15kg per ha, will be a permitted activity, provided that from 1 January 2017, further conditions primarily concerning Farm Environment Plans will also need to be complied with.

126. The evidence of Dr Hume describes the relationship between soil type, and nitrogen loss. In summary, his evidence is that light or very light soils, because of their free draining nature, are more prone to nitrogen leaching, than heavier, less free draining soils. Consequently, use of a consistent 15kg per ha per year under Variation 1, gives greater flexibility to manage farming activities within nitrogen discharge limits to farmers on heavier soils, than those on light soils.

127. The lighter soils are a significant natural and physical resource of the region and catchment. They are the predominant soil type in the Selwyn Te Waihora catchment. Enabling the efficient and effective utilisation of these soils will in turn enable people and communities to provide for their social, economic and cultural well-being, but this must be done in a such a way that sustains the potential of other natural and physical resources to meet the needs of future generations, safeguards the environment, and avoids, remedies and mitigates adverse effects.

\textsuperscript{35} S 104D
\textsuperscript{36} See \textit{King Salmon}, at para 129 and 152.
128. Dr Hume considers that a tiered approach based on soil types, of 15 kg/ha/yr for heavy and medium soils, and 20 kg/ha/yr for light and very light soils would help enable reasonable flexibility of land use on all soil types, while allowing scrutiny of any proposals for conversion to high N loss activities.\(^{37}\)

129. The figure of 15 kg has been allocated to all farming to provide;

"moderate scope for farming activities losing less than 15 kg/N/ha to develop and change land use in response to economic conditions.\(^{38}\)

130. The s 32 report goes on to say that:

"Farms on medium and heavy soils, with low nitrogen losses, will have the greatest ability to change their land uses and less need to employ additional mitigation measures to manage nitrogen losses.

Farming activities, exceeding the 15 kg/N/ha threshold, that are not provided for within Central Plains Water load limit are the least likely to be able to develop and change in response to market and industry demands. These would include dairy farms, dairy support, or farms with high stocking rates of beef, deer and pigs and vegetables on medium, light, very light or extremely light soils.

A period of up to 15 years has, however, been provided for these land uses to adjust their practices and adopt mitigation measures."

131. The reference to a 15 year period appears to relate to Policy 11.4.15, and the possible extension of timeframes beyond 2022. This policy, in itself, gives little certainty to farmers, despite the authors of the s 32 report putting some emphasis on the need for some flexibility to allow adjustment of land use practices and adoption of mitigation measures.

132. The entire Selwyn Te Waihora catchment load allocated to farming activity under Variation 1, is 4830 tonnes per year\(^{39}\). This load is identified as a target, not a limit\(^{40}\), to be achieved by 2037. The 15kg/ha/yr threshold is part of a suite of methods which aim

\(^{37}\) See EIC of Dr Hume at para 30.
\(^{38}\) See s 32 report, pg 85, para 3.
\(^{39}\) See table 11(j) Variation 1 document.
\(^{40}\) Noting that the NPSFM 2011 defines a target as a limit to be met within a defined timeframe. The farming nitrogen load for the catchment for farming activities of 4830 tonnes per year is to be met no later than 2037, and includes the limit to be met by 2022 associated with the CPW irrigation scheme.
to achieve this target, specifically it represents an allocation of 520 tonnes per year for low leaching properties. As estimated in the s 32 report:\textsuperscript{41}

"Approximately 500 properties (14 percent) would be required to reduce their nitrogen loses by 10 – 40%. These properties are predominantly on free draining soils in the middle of the catchment. Approximately 1100 properties (31 percent) could intensify their production to a varying degree. These properties are predominantly on heavier soils in the catchment."

133. It is submitted that the ha/yr figure is a relatively blunt instrument, and one that can be refined without necessitating either an increase in the total catchment load target, nor a reduction in the likelihood of achieving that target.

134. First, the 15 kg/ha/yr is an approximation. Some farming activities will, of course, be discharging at greater rates than this. This will be loosely reflected in the ‘nitrogen baseline’ for that property, assessed as an average of calculated discharges over the 2009 – 20013 period.\textsuperscript{42} Equally, some farming activities will discharge at lesser rates. Accordingly, Variation 1 takes an ‘unders and overs’ approach to achieving the identified catchment load target. It is submitted that it is not a figure that has been demonstrated, with scientific or statistical certainty, to guarantee delivery of the identified catchment load target.

135. Federated Farmers does not take issue with this approach in principle, but does submit that its limitations need to be acknowledged and recognised. Furthermore, and I emphasise this point, Federated Farmers does not seek to increase the total load target for the catchment. Rather it is submitted that increasing, to 20kg/ha/yr the permitted allowance for farming activities on light and very light soils will provide a fairer, more equitable, and ultimately more efficient means of working towards achieving the total load target.

136. In particular, such an approach would provide greater flexibility to dryland, and low intensity farming operations to continue, without the need to trigger a consenting process, while still enabling greater scrutiny, through consent requirements, where changes in land use lead to intensification of nitrogen discharges above 20 kg/ha/yr on light or very light soils.

\textsuperscript{41} At pgs 83 – 84.
\textsuperscript{42} See earlier discussion regarding the inaccuracy of the ‘nitrogen baseline’ as a reflection of N discharges from existing farming activities.
137. Environment Canterbury’s “best available information”, contained in the draft Variation 1 released for consultation purposes, resulted in;

“strong concerns [being] expressed at this time on the fitness for purpose of the data for the use at the farm level, the narrowness of the farm type categories in the table for arable and horticulture and the accuracy of the tables when applied at a property level, and hence defensibility of the leaching loss rates.”

138. Despite these tables being removed from the variation, the information they contained continues to underpin the 15kg/ha/yr nitrogen threshold.

139. At pages 157 and 158 of the s 42A report, it is said that increasing the 15kg/ha/yr threshold to 20 kg/ha/yr would increase the total catchment load limit by “approximately 111%”. There are several observations I wish to make about this hypothesis.

140. First, the ‘total catchment load’, is not expressed as a limit, it is expressed as a target. The figure of “111%” gives the impression of scientific accuracy. But in reality it is an approximation, and appears to be an estimate.

141. Second, the estimated increase in proposed catchment load is expressed on the basis of an across the catchment increase to 20kg/ha/yr. That is not what the submission of Federated Farmer’s sought. Rather, it sought an increase from 15 to 20kg/ha/yr only for light and very light soils. While these soils “occupy most of the land are north-west of State Highway 1,” they are not uniformly present throughout the entire catchment.

142. At para 11.57, in relation to this issue, the s 42A report concludes that “an increase above 15kg/ha/yr would require the increase to be off-set by some other mechanism, in order to remain within the target”. This conclusion is accepted, to an extent, however it is submitted that crucially, what is not acknowledged is that it is unclear as to what extent an offset might be required. Further information, such as that to be gained through the MGM project, will clarify this over time, and well before the 2037 date for achieving the target catchment load.

143. In conclusion on this point, it is submitted that the current proposed threshold of 15kg/ha/yr will preclude flexibility, particularly for dry-land farmers on light or very light soils within the catchment. Whether consent can even be sought, will turn on whether

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43 See table 11(i) Variation 1 document.
44 EIC of Dr Hume, at para 24.
there has been any increase above the ‘nitrogen baseline’, and if consent can be sought, a farm environment plan will be critical. The regulatory scheme should be targeted at the source of significant nitrogen discharges in the catchment, and in particular should primarily come into play when land use intensification is proposed. It is submitted that capturing ‘low end’ dischargers is not only inefficient and ineffective, it has the potential to frustrate the reasonable economic use of land, and potentially will encourage applications for greater intensification of land use as landowners grapple with consenting requirements.  

*Reductions to be achieved in 2017 and 2022*

144. Rule 11.5.9 requires that from 1 January 2017, the use of land for a farming activity is a restricted discretionary activity if the nitrogen loss calculation for the property exceeds 15kg/ha/yr. Discretion is restricted to matters including ‘the Good Management Practice Nitrogen and Phosphorus Loss Rates to be applied to the property in accordance with Policy 11.4.13(b)’ and ‘the nitrogen loss rules to be applied to the property in accordance with Policy 11.4.14(b), Policy 11.4.15 and Policy 11.4.16.’

145. In practice, what the rules and policies propose is ongoing reduction in nitrogen discharges for farming properties, first by 2017, to meet the ‘Good Management Practice Nitrogen and Phosphorus Loss Rates’ for the property’s baseline land use, and second by 2022 further percentage reductions, based on farming type, from the 2017 levels.

146. This approach is described in the s 32 report as;

> “a planning framework whereby once the Matrix of Good Management project has been completed it can be used to set conditions on nitrogen leaching loss rates (for 2017 then apply percentage reductions to derive loss rates from 2022)”

147. It is submitted that this approach raises questions of certainty and fairness for plan users. As the EIC of Dr Williams explains, the Matrix of Good Management project is a work in progress. While it has the potential to deliver robust, credible and transparent benchmarks that will be invaluable in managing farmland to minimise N and P losses, that information is not available at present. Accordingly, there is real uncertainty in assessing how the proposed policy and rule regime in Variation 1 will impact on plan

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45 See EIC of Dr Pangborn, at paras 27 – 28.
46 At page 79.
users. In particular, it is unclear what levels of discharge farmers will be required to meet in 2017, and what figure the percentage reductions required in 2022 are to be calculated from.

148. That uncertainty is objectionable in itself, and raises issues as to the vires of the approach. Depending on how the MGM process is introduced into and reflected in the Variation, or proposed Plan, Council may be inappropriately reserving its discretion, or even abrogating its discretion, over substantive matters which plan users should be able to engage in through the Schedule 1 process.

149. The s 32 report acknowledges that there will be difficulties in meeting the reductions to be required (even though we don’t know what those requirements are to be yet). It states⁴⁷:

"Where the percentage reductions are not able to be met in 2022, a maximum time period of 15 years is available in order for properties to make the percentages reductions required."

150. This statement, however, does not reflect the proposed planning framework in Variation 1. There is no reference to a 15 year period to transition necessary reductions, in the policies or rules. Rather, there is a rather vague policy 11.4.15, which provides for the possibility of an extension in timeframe, but gives no certainty that it will be available.

151. In these circumstances, farmers are left with great uncertainty as to what levels of nitrogen discharge they will be required to comply with under the Variation, and what levels they will be required to reduce from in 2022. As the submission of Federated Farmers notes, there is no way to ascertain whether the reductions to be required under MGM are achievable and at what cost. Are they efficient or effective means of achieving the relevant objectives? How can we know?

152. Federated Farmers opposes rule 11.5.9 making every farm losing more than 15kg ha/yr a restricted discretionary activity from 1 January 2017. The rule is ambiguous and uncertain. Amendments are suggested to the rule. The outcome of the MGM process should be introduced into the Variation, or proposed Plan, through a further Variation or Plan Change using the Schedule 1 process.

⁴⁷ At page 80.
Farm Environment Plans

153. Federated Farmers supports the use of farm environment plans in appropriate circumstances. Such plans are acknowledged as an effective and efficient means of assisting in the achievement of sustainable management, and in the context of the Selwyn Waikoua catchment, the realisation of the vision of Variation 1. However, farm environment plans are not free. They come at a cost, and as such impose an additional expense on farm properties. Furthermore, there are a limited number of persons qualified and able to prepare such plans. For these reasons, Federated Farmers submits that use of farm environment plans as a tool to assist in managing farm nutrient discharges should be targeted to the areas and properties which are at greatest risk of contributing to the nutrient discharge load of the catchment, and that a staggered approach should be adopted to phasing in the requirement to have such a plan in place. In the context of Selwyn Te Waikoua, it is submitted that the following requirements for farm environmental plans should be introduced through Variation 1.

<table>
<thead>
<tr>
<th>Area</th>
<th>Farm property or farm enterprise size</th>
<th>Date plan implementation required by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Te Waihora Cultural Landscape Values Management Area</td>
<td>&gt;10 ha</td>
<td>1/1/2016</td>
</tr>
<tr>
<td>Phosphorus Risk Management Area</td>
<td>&gt;50ha</td>
<td>1/1/2017</td>
</tr>
<tr>
<td>Phosphorus Risk Management Area</td>
<td>&gt;10ha and &lt;50ha</td>
<td>1/1/2020</td>
</tr>
<tr>
<td>Nitrate Loss Risk Area, where property has nitrogen baseline of &gt;15kg/ha/yr, or &gt;20kg/ha/yr on light or very light soils</td>
<td>&gt;50ha</td>
<td>1/1/2017</td>
</tr>
<tr>
<td>Nitrate Loss Risk Area, where property has nitrogen baseline of &gt;15kg/ha/yr, or &gt;20kg/ha/yr on light or very light soils</td>
<td>&gt;10ha and &lt;50ha</td>
<td>1/1/2021</td>
</tr>
</tbody>
</table>
154. However, where the property is outside the identified cultural landscape values management area, or the nutrient loss risk areas, or its nitrogen baseline is below the identified thresholds, then it is submitted that the efficiency and effectiveness of a farm environment plan is significantly limited, such as to not warrant the administrative burden and expense of preparation and audit. In essence, it is submitted that if the risks are low, there is little to justify the requirement for a plan, from an effects based management perspective.

155. Similarly, the requirement to calculate a nitrogen loss calculation annually, should be targeted at activities which are the greatest generators of nitrogen discharge, not across the board.48

Allocation, Transfer and Storage of Water

Water Allocation

156. Federated Farmers supports the recognition of the link between surface water and groundwater on the Canterbury plains and the combined allocations. However, it opposes the proposed changes to table 11(e).

157. The Zone Committee recommendations set minimum flows in lowland streams which require approximately a 78% reduction in the Selwyn-Waimakariri Zone allocation and 60% in Rakaia-Selwyn Zone allocation. The Committee concluded this target can only be achieved through groundwater recharge and stream augmentation using Central Plains Water.

158. Objective B1 of the NPS FM 2011 and 2014 is;

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of freshwater, in sustainably managing the taking, using, damming or diverting of freshwater.

159. While Objective B2 of the NPS FM 2011 and 2014 is;

To avoid any further over-allocation of fresh water and phase out existing over allocation.

48 See EIC of Mr Bennett, at paras 61 – 66.
160. While these objectives are acknowledged as being strongly phrased and highly directional, it is submitted that they nevertheless recognise the ongoing need for careful management of reductions to address any over allocation, and the effects of those reductions on sustainable management of other resources. Furthermore, the setting of limits that can only be achieved through recharge as a consequence of the CPW scheme is questionable. The focus should be on identifying achievable reductions in existing over allocation, not addressing predicted allocation scenario which might arise if or when CPW eventuates.

Demonstrated or Reasonable Use

161. Federated Farmers is opposed to moving water permit holders from an allocation based on reasonable use, to one based on demonstrated use. Demonstrated use is likely to reflect short term rainfall conditions, rather than longer term requirements. As an approach, it is one which will encourage inefficient water use, as permit holders increase actual consumption to bolster their allocation to support operations in drier years.\(^{49}\)

150. For similar reasons Federated Farmers opposes the move to set reliability of water supply at 8.5 years out of 10. In this respect it is noted that the proposed Plan sets reliability of supply for reasonable use at 9 years out of 10.\(^{50}\)

151. An alternative option for reducing the potential volume of water abstracted from the catchment, while still leaving water permit holders access to sufficient allocation in dry years was put forward in Federated Farmers submission as follows;
- To ensure all water permit holders have an annual volume condition based on reasonable use calculated in accordance with Schedule 10.
- To divide the annual volume into two blocks: block A which is the quantum of water likely to be used in an average rainfall year; and block B being the additional water required to ensure reliability in 9 years out of 10.
- Block B is not able to be transferred to any other site and is only available for abstraction in 'dry year' conditions.

Transfer of Water Permits

\(^{49}\) Refer EIC of Dr Hume, at paras 18 – 20.
\(^{50}\) See Schedule 10, proposed Plan.
152. Federated Farmers supports the need to address any over allocation of the catchment for water abstraction, but opposes proposed policy 11.4.22(c) and Rule 11.5.37(4) as these are not considered to be the most efficient or effective methods of achieving allocation reductions. These policy and rule subparagraphs require the surrender of 50% of the transferred water allocation volume.

153. Such a significant surrender requirement could undermine the effectiveness of this method at delivering reductions in allocation.51

154. Furthermore, decisions on the proposed Plan have already dismissed the appropriateness of rules in a plan requiring a blanket surrender of water when transferring water permits. This proposed rule appears contrary to that earlier decision. Requiring the surrender of half the allocated water on transfer is not a reliable method of reducing over-allocation, as any actual reduction will be dependant on permit holders wanting to transfer water abstraction rights.

155. An alternative method was put forward in the submission of Federated Farmers, being to limit transfer rights to water that the water permit holder can demonstrate they have used within the last 5 years, and then only to that portion of the permit which is in the water allocation in accordance with the ‘block’ approach outlined in the Federated Farmers submission.

Water Storage

156. Federated Farmers agrees the adverse effects of water storage proposals on Ngai Tahu values must be avoided, remedied or mitigated in considering any water storage proposal. However the current wording of Policy 11.4.32(c) requires that adverse effects on cultural values be satisfactorily avoided or mitigated in accordance with the recommendations in a cultural impact assessment. This suggests that the proposal can only proceed if that is recommended in the cultural impact assessment, and so the policy purports to inappropriately fetter the discretion of the decision maker, or confer a veto power on the author of the cultural impact assessment report.

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51 Refer EIC of Mr Bennett at paras 99 – 104.
157. Accordingly Federated Farmers seeks the deletion of the words “in accordance with the recommendations in the cultural impact assessment” from policy 11.4.32(c).

CONCLUSIONS

158. Federated Farmers supports the intent of Variation 1, and in particular, is committed to enabling the realisation of the Vision, that is to restore the mauri of Te Waihora while maintaining the prosperous land-based economy and thriving communities.

159. It is however, considered that, in a number of respects Variation 1 seeks to do too much, too soon, and with too little information.

160. The planning framework to be established by Variation 1 will, of course, have lasting impacts on the Selwyn Waihora catchment, and its communities.

161. Further robust information is becoming available which will enable more informed decision making regarding the significant environmental, economic, cultural and social implications of the changes proposed by Variation 1.

162. Federated Farmers seeks a range of changes to Variation 1, as outlined in its submission and further submission, and as discussed in these legal submissions and the evidence to be called in support.

Dated 15 September 2014

Dean van Mierlo
Counsel for North Canterbury Province of Federated Farmers New Zealand
Annexures

1 Summary of changes or relief sought by North Canterbury Federated Farmers.
3 E Can  Nitrogen Baseline Compliance Note, April 2014.
Nitrogen Baseline Compliance Note

April 2014

On 18 January 2014, Environment Canterbury notified the decisions on the proposed Land & Water Regional Plan (pLWRP). The plan includes rules to regulate the use of land for a farming activity and the associated nitrogen loss.

Within nutrient red and lake zones, the rules in the pLWRP require farming activities to restrict their average nitrogen loss calculation to that which occurred during the nitrogen baseline period.

Environment Canterbury recognises that many decisions affecting the way a farm will be operated are typically made in the third quarter of a calendar year.

These operational decisions will have an impact on both the nitrogen loss for the current year (30 June 2013 – 1 July 2014), and the overall nitrogen loss calculation for the next four years. Consequently, full compliance with the nitrogen baseline may be challenging.

Because these on-farm decisions were made before the pLWRP decisions were notified, there has been limited opportunity for farmers to take into account the constraints of the nutrient management rules.

In recognition of this, Environment Canterbury provides the following advice with regard to the way compliance with the nitrogen baseline will be administered:

- The 1 July 2013 – 30 June 2014 year is a “transitional year” between the nitrogen baseline period and the first full year under the pLWRP nutrient provisions. As a result of this Environment Canterbury anticipates that nitrogen losses may exceed the nitrogen baseline. Farmers will not be penalised if this occurs.

- From 30 June 2014 onwards, Environment Canterbury expects all farmers in red zones and lake zones to introduce management initiatives and practice changes to ensure long-term compliance with their nitrogen baseline. In addition, Environment Canterbury reserves the right to take enforcement action against a farmer if the nitrogen loss calculation for the property is higher than the worst year in the nitrogen baseline period, and there is no evidence of a genuine attempt to remain within the baseline.

- All farmers are expected to be operating at or below their nitrogen baseline after 30 June 2017, and Environment Canterbury recommends that all farmers consider what impacts farm management decisions made now and in future will have on their ability to comply with the nitrogen baseline.
Nitrogen Baseline Period
(1 July 2009 – 30 June 2013)

Transitional Year
(1 July 2013 – 30 June 2014)

Nitrogen Baseline Figure
(1 July 2009 – 30 June 2013)

Nitrogen Loss Calculation
(1 July 2012 – 30 June 2015)

From 30 June 2014 onwards
Expectation to implement measures to reduce
nitrogen leaching to a level that achieves compliance
with the nitrogen baseline by 1 July 2017

Key terms

**Nitrogen baseline** means:

(a) the discharge of nitrogen below the root zone, as modelled with OVERSEER™, or equivalent model approved by the Chief Executive of Environment Canterbury, averaged over the period of 1 July 2009 – 30 June 2013, and expressed in kg per hectare per annum, except in relation to Rules 5.46 and 5.62, where it is expressed as a total kg per annum from the identified area of land; and

(b) in the case where a building consent and effluent discharge consent have been granted for a new or upgraded dairy milking shed in the period 1 July 2009 – 30 June 2013, the calculation under (a) will be on the basis that the dairy farming activity is operational; and

(c) if OVERSEER™ is updated, the most recent version is to be used to recalculate the nitrogen baseline using the same input data for the period 1 July 2009 – 30 June 2013.

**Nitrogen loss calculation** means the discharge of nitrogen below the root zone, as modelled with OVERSEER™, or equivalent model approved by the Chief Executive of Environment Canterbury, averaged over the most recent four-year 1 July to 30 June period and expressed in kg per hectare per annum. If OVERSEER™ is updated, the most recent version is to be used.
**Summary Table of Relief Sought**

**Hearing of submissions and further submissions of the North Canterbury Province of Federated Farmers Variation 1 to the Proposed Canterbury Land and Water Regional Plan**

**18 September 2014**

<table>
<thead>
<tr>
<th>Description of Relief</th>
<th>Amendments Sought (additional words underlined and deletions shown as strikethrough)</th>
<th>Reference in submission of NCFF or further submission of NCFF</th>
<th>Reference in Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a new objective to reflect vision for catchment</td>
<td>Include a catchment objective that reads: &quot;The mauri of te Waihora and its tributaries is restored while maintaining a prosperous land-based economy and thriving communities in the Selwyn-Te Waihora catchment.&quot;</td>
<td>Paragraph 2</td>
<td>EIC of M Bennett, paras 15 – 22.</td>
</tr>
<tr>
<td>Water Quality – Policies 11.4.12 to 11.4.16 (Until 01 July 2017)</td>
<td>Delete policies 11.4.12 to 11.4.16 and replace with alternative policies 11.4.12, 11.4.13 and 11.4.14. <strong>New Policy 11.4.12:</strong> Reduce the discharge of nitrogen, sediment, phosphorous and microbial contaminants from farming activities into the catchment by: (a) Excluding intensively farmed livestock from all waterways and avoid the standing of cattle, pigs or deer in any waterway except for those parts of the catchment shown as hill and high country on Planning Map X. (b) Providing setbacks for grazing and cultivation from waterways and where appropriate riparian planting. (c) Requiring all farming practices to implement the good management practices listed in Schedule 24 to minimize the discharge of contaminants to water; (d) Avoiding any increase in nitrogen-nitrate loss from any property or farm enterprise if the estimated nitrogen loss using Overseer is greater than 15kg per hectare per annum; and (e) Requiring those properties or farm enterprises with nitrogen-nitrate losses which are estimated using Overseer to exceed 15kg per hectare</td>
<td>Paragraph 3.1</td>
<td>EIC of M Bennett, paras 23 – 29, 58. EIC of L Hume paras 7- 11, 12 – 17, 22 – 23, 29 – 30. EIC of M Pangborn, paras 25 – 28.</td>
</tr>
<tr>
<td>Water Quality Policies 11.4.12 to 11.4.16 (From 01 July 2017)</td>
<td>Delete policies 11.4.12 to 11.4.16 and replace with alternative policies 11.4.12, 11.4.13 and 11.4.14.</td>
<td>Paragraph 3.1</td>
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|                                                          | **New Policy 11.4.13:**  
|                                                          | By 01 July 2016 include by way of a plan change a schedule of maximum nitrogen loss rates for farm activities on soil types within the catchment, which properties or farm enterprises must comply with by 2022; or  
|                                                          | If no such schedule exists then from 01 July 2017 limit the loss of nitrogen-nitrates from farming activities which are estimated using Overseer to exceed 15kg per hectare per annum or 20kg per hectare per annum on areas shown on Planning Map XX as light or very light soils in the following way:  
|                                                          | (i) Avoid any increase in estimated nitrogen loss from any property or farm enterprise where estimated nitrogen loss using Overseer is greater than 15kg per hectare per annum or 20kg per hectare per annum in areas shown on Planning Map XX as light or very light soils;  
|                                                          | (ii) Require properties or farm enterprises where nitrogen loss is estimated using Overseer to exceed 15kg per hectare per annum or 20kg per hectare per annum in areas shown on Planning Map XX as light or very light soils, to develop and implement a nitrogen reduction plan using Best Practicable Options to reduce their nitrogen losses; and  
|                                                          | (iii) By 2037, avoid any property or farm enterprise having nitrogen losses estimated using Overseer which exceeds 80kg per hectare per annum. | **EIC of M Bennett, paras 30 – 37, and 38 – 43.** |
|                                                          | **EIC of L Hume, paras 22 – 23, 24 – 26, 27 – 28, 31 – 33.** | **EIC of R. Williams.** |
|                                                          | **EIC of M Pangborn, paras 11 – 24.** | **Lay Evidence of M Shipley.** |
|                                                          | **Lay Evidence of I Upston.** | |

**Water Quality Policies 11.4.12 to 11.4.16 (Farm Environment Plans)**

Delete policies 11.4.12 to 11.4.16 and replace with alternative policies 11.4.12, 11.4.13 and 11.4.14.

**New Policy 11.4.14**

Require properties and farm enterprises to develop and implement Farm Environment Plans in accordance with Schedule 7, Part A to assist in managing reductions in discharges as follows:

<table>
<thead>
<tr>
<th><strong>EIC of M Bennett, paras 61- 63, 64 - 70 and 82 – 83.</strong></th>
<th><strong>Rebuttal of M Bennett, para 3.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>EIC of L Hume, paras 7 – 11, 24 – 26, 29 – 30.</strong></td>
</tr>
</tbody>
</table>
(i) Any property or farming enterprise within the 'Te Waihora Cultural Landscape Values Management Area' and greater than 10 hectares in area is to implement a Farm Environmental Plan to minimise the risk of discharging phosphorous, sediment, microbial contaminants and other contaminants to water by 1 January 2016.

(ii) Any property or farming enterprise within the areas zoned 'Phosphorous Sediment Risk Area' on the planning maps is to implement a Farm Environmental Plan to minimise the risk of discharging phosphorous, sediment and microbial contaminants to water by 1 January 2017 if the property or farm enterprise is greater than 50 ha in size or by 01 January 2020 if the property or farm enterprise is between 10 and 50 hectares in size.

(iii) Any property or farming enterprise located within the areas Zoned Nitrate Loss Risk Area and has a nitrogen baseline that exceeds 15kg per hectare per annum, or 20kg per hectare per annum in areas shown on Planning Map XX as light or very light soils, is to implement a Farm Environmental Plan to minimise the discharge of nitrogen-nitrates by 01 January 2017 if the property or farm enterprise is greater than 50 hectares in size or by 01 January 2021 if the property or farm enterprise is between 10 and 50 hectares in size.

| Water Quality - Rules 11.5.6 to 11.5.13 | Add a clause to the end of Rule 11.5.6(2), 11.5.7(1), 11.5.8(1) and 11.5.9(1) which reads: “...or 20 kg per hectare per annum in the areas shown on Planning Map XX as light and very light soils.” | Paragraph 3.2 | EIC of M Bennett, paras 57 - 63. EIC of L Hume, paras 7 - 11, 24 - 26, 29 - 30. Lay Evidence of M Shipley. Lay Evidence of I Upston. |
| Water Quality - | Amend Rule 11.5.8(3) and 11.5.8(4) to read: | Paragraphs 3.3 - 3.5 | EIC of M Bennett, paras 61-70. |
| Rules 11.5.6 to 11.5.13 | “A Farm Environment Plan has been prepared and implemented in accordance with Schedule 7 Part A for all properties greater than 50 hectares which are located in the areas shown on Planning Maps XX as being in the ‘Phosphorous Sediment Risk Area’; or are located in the area shown on Planning Map XX as the ‘Nitrate Loss Risk Area’ and have a nitrogen baseline or a nitrogen loss calculation which exceeds 15kg per hectare per annum or 20kg per hectare per annum in the areas shown on Planning Map xx as light or very light soils;

Amend Rule 11.5.8 by adding after subclause (1) two new subclauses which read:

“or

(2) the nitrogen loss calculation for the property exceeds 15kg per hectare per annum or 20kg per hectare per annum in areas shown on Planning Map xx as light or very light soils but does not exceed the applicable rate for nitrogen loss shown in Table XX; and

Water Quality – Rule 11.5.9 | Amend Rule 11.5.9(1) so it reads:

“(1) The nitrogen loss calculation for the property exceeds the applicable rate for nitrogen loss shown in Table XX, or if there is no applicable rate in Table XX, the estimated nitrogen loss rates exceed 15kg per hectare per annum, or 20kg per hectare per annum as areas shown on the planning maps as light or very light soils.; and

Add a new clause 4 which reads:

“(4) A nitrogen reduction plan is developed and implemented for the property to reduce nitrogen losses to comply with the applicable rate in Table XX, or if there is no applicable rate in Table XX to show how nitrogen loss shall be minimised using best practicable options.”

Amend matters of discretion clause 3 to read:

“Methods to achieve nitrogen reductions from the property in accordance with Policy 11.4.13.”

Water Quality – | No specific decision requested. Submitter seeks that Rule 11.5.12 be combined with Rule 11.5.6


Paragraphs 3.6 – 3.8
EIC of M Bennett, paras 30 – 37.
EIC of R Williams.
EIC of M Pangborn, paras 11 – 24.

V1pLWRP - 1576
EIC of M Bennett, paras 33(4) and 36.
<table>
<thead>
<tr>
<th>Further submission in support of the submission of DairyNZ (ID 52271)</th>
<th>with Rule 11.5.11 such that any farming activity that does not meet one or more of the conditions of restricted discretionary activity becomes a non-complying activity and not prohibited.</th>
<th>Rebuttal Evidence of M Bennett, para 13.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Quality (Further Submission in opposition to submission of ANZCO, CMP Canterbury &amp; CMP Rakaia (ID 52274))</td>
<td>Amend Table 11(i) by deleting &quot;Industrial or trade processes &quot; from the Activity column, &quot;106&quot; from the Nitrogen Load column and &quot;limit&quot; from the Limit/Target column. Amend the table title to read: &quot;Catchment Target and Limits for Nitrogen Losses from Farming Activities and Community Sewerage Systems&quot;</td>
<td>V1pLWRP - 1474 EIC of M Bennett, paras 44 – 48.</td>
</tr>
</tbody>
</table>
| The definition of nitrogen baseline. | Add a definition of 'nitrogen baseline' to section 11.1.A that reads: "Nitrogen Baseline Selwyn-Te Waihora Section... means any one of the following calculations:  
(a) The mean maximum discharge of nitrogen below the root zone in any one year, as modelled with OVERSEER™, or equivalent model approved by the Chief Executive of Environment Canterbury, over the period of 01 July 2009 – 30 June 2013, and expressed in kg per hectare per annum, except in relation to Rules 5.46 and 5.62, where it is expressed as a total kg per annum from the identified area of land; or  
(b) in the case where a resource consent has been granted to take or use water or discharge dairy shed effluent in the period 01 July 2009 – 30 June 2013, and that resource consent specifies a condition relating to the use of the water or a nitrogen discharge allowance, the calculation will be on the basis of that condition; or  
(c) A nitrogen baseline for the property which is approved by the Chief Executive Officer of Environment Canterbury as a fair representation of the potential land use on the property as at 01 January 2014 considering where the property was dryland or irrigated and, if irrigated, the volume of water allocated and the purpose for which any water permit had been issued.  
(d) If OVERSEER™ is updated and a new nitrogen baseline is required the most recent version is to be used to recalculate the | Paragraph 4.1 EIC of M Bennett, paras 49 – 56. EIC od L Hume, paras 22 – 23. Lay Evidence of M Shipley. |
The application of definition of nitrogen baseline.

Amend Rules 11.5.6(2) and 11.5.7(1) and 11.5.8(1) to read:

"The nitrogen baseline for the property does not exceed 15kg per hectare per annum or 20kg per hectare per annum in areas shown on Planning Map XX as light and very light soils, and since the baseline was calculated there has been:
- No increase in irrigable area on the property; and
- No increase in the number of weaned cattle grazed on the property; and
- No increase in the area under cultivation on the property;

Or

The nitrogen loss calculation for the property does not exceed 15kg/ha/yr or 20 kg/ha/yr in areas shown on Planning Map XX as light and very light soils."

Cultural Landscape/Values Management Area – drainage management

Delete Rule 11.5.21 (1) and replace with the following:

"(1) In the Lake Area in the cultural Landscape/Values Management Area in the Selwyn-Te Waihora Catchment the discharge is provided for within a land drainage management plan approved by the Chief Executive of Environment Canterbury."

Cultural Landscape/Values Management Area – timeline to complete Farm Environment Plans (Further Submission in support of submission of Nga Rūnanga and Te

Amend to replace Policies 11.4.6 to 11.4.17 with the following:

6. To progressively implement Farm Environment Plans within the catchment where the discharge from the farming activity or farm enterprise discharge is greater than 15kg/ha/year:
   (a) For farming activities or farm enterprise, greater than 10ha in area and located within the Cultural Landscape/Values Management Area, require Farm Environment Plans from 1 January 2016;
   (b) For farming activities or farm enterprise, greater than 50ha in area and located outside the Cultural Landscape/Values Management Area, require Farm Environment Plans from 1 January 2017;"
<p>| Stock Exclusion – Hill and High Country | Add a new clause to Rule 11.5.18 to read: “Rule 5.68(3) does not apply to land which is shown on Planning Map as being zoned hill or high country.” | Paragraph 6 | Lay Evidence of J Guild. |
| Water Allocation – Reasonable Use | Replace Policy 11.4.23 with the following: “Reallocate water to existing consent holders as follows: i. An allocation based on Reasonable Use as calculated in accordance with Schedule 10; ii. Divide the allocation between an allocation being the volume of water which is located reasoned for the repurposed use in an average rainfall year as calculate day Environment Canterbury and a B allocation which is located available for use to ensure reliably of supply in nine years out of ten for a system with an application efficiency of 80%.” | Paragraph 7.1 | EIC of M Bennett, paras 90 – 93. |
| Water Allocation – Reliability | Amend Policy 11.4.6 as follows: “Where a consent applicant holds shares in an irrigation scheme, limit any additional consented volumes to the volume required to meet demand conditions in eight nine years out of ten for a system with an application efficiency of 80%.” | Paragraph 7.2 | EIC of M Bennett, paras 94 – 98. EIC of L Hume, paras 18 – 21. |
| Water Allocation – Claw-backs | Replace Table 11(e) Combined Surface Water and Groundwater Allocation Limits for Selwy-Waimakariri-Rakaia-Selwyn, Groundwater Allocation Zones with the limits from the pLWRRP and NRPP based on maintaining minimum flows on lowland streams at 50% of 7D MALF or a replace with limits from a more robust modelling of groundwater availability and allocation. | Paragraph 7.3 | EIC of M Bennett, paras 85 – 89. |
| Transferring Water Permits | Delete Policy 11.4.22(c). Delete Rule 11.5.37(4) and replace with: “If the transfer is within the Rakaia-Selwyn or Selwyn-Waimakariri Combined Surface and Groundwater Allocation Zones: - Only an A Block of groundwater allocation may be transferred in accordance with Policy 11.4.23; and - The water permit must have been exercised by the permit holder within” | Paragraph 8 | EIC of M Bennett, paras 99 – 104. |</p>
<table>
<thead>
<tr>
<th>Water Storage - Policy 11.4.32</th>
<th>Amend Policy 11.4.32(c) by deleting the words &quot;...in accordance with the recommendations in the cultural impact assessment...&quot;</th>
<th>Paragraph 9</th>
<th>EIC of M Bennett, paras 105 – 106.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions - Intensive Winter Grazing</td>
<td>Amend the definition of 'intensive winter grazing' to read: &quot;means grazing of stock between 1 May and 30 September on fodder crops or pasture where to the extent that the grazing results in removal of, or damage to vegetation and exposes bare ground and/or pugging of the soil, significant pugging or de-vegetation. This is usually associated with break feeding behind temporary fencing.&quot;</td>
<td>Paragraph 10.1</td>
<td>Lay Evidence of J Guild.</td>
</tr>
<tr>
<td>Definitions - Farm Enterprise</td>
<td>Add a new definition of farm enterprise to section 11.1A which reads: &quot;means areas of land whether held in single or multiple ownership and whether adjoining or separated which are farmed as a single operating unit for the purpose of nutrient management.&quot;</td>
<td>Paragraph 10.2</td>
<td>EIC of M Bennett, paras 71 – 73.</td>
</tr>
<tr>
<td>Schedule 24 (Farm Practices)</td>
<td>Amend Schedule 24 (c) and (d) to read: (c) &quot;For all intensive winter grazing adjacent to...or wetland, maintain a vegetative strip to prevent gross discharge of contaminants unless in exceptional circumstances such as very intense rainfall. As a guideline, intensive winter grazing and cultivation will be set back 5m or 2m from the bed. Greater or lesser setbacks may be appropriate, depending on density and type of stock, farm management practice, soil properties, and the presence of sloping ground, swales, or contaminant flow paths.&quot; (d) &quot;For all cultivation adjacent to...wetland, maintain a vegetative strip to prevent gross discharge of contaminants unless in exceptional circumstances such as very intense rainfall. As a guideline, intensive winter grazing and cultivation will be set back 5m or 2m from the bed. Greater or lesser setbacks may be appropriate, depending on density and type of stock, farm management practice, soil properties, and the presence of sloping ground, swales, or contaminant flow paths.&quot;</td>
<td>Paragraph 11</td>
<td>Lay Evidence of J Guild.</td>
</tr>
</tbody>
</table>
**Natural Hazards**

**Indicator:** Rainfall

**Yearly Rainfall Levels in Christchurch, 1980 to 2009**

*Note: Christchurch refers to the Christchurch City Council area, pre-amalgamation with Banks Peninsula, March 2006*

- **Key Points:**
  - At Christchurch Airport, between 1980 and 2009, there were 13 years which had rainfall levels higher than the normal of 630mm and 17 years which had lower levels. In 2009, the yearly rainfall level was 589mm.
  - At Christchurch Botanic Gardens, between 1980 and 2009, there were 13 years which had rainfall levels higher than the normal of 653mm and 16 years which had lower levels. In 2009, the yearly rainfall level was 638mm.
  - The highest yearly rainfall was in 1986, with 832mm and 993mm at Christchurch Airport and Christchurch Botanic Gardens, respectively.
  - The lowest yearly rainfall was in 1988, with 306mm and 293mm at Christchurch Airport and Christchurch Botanic Gardens, respectively.

**What is this about?**

The graph shows the yearly annual rainfall for the past thirty years, measured at Christchurch Airport and Christchurch Botanic Gardens. The normal is the Standard 30-Year Normal Period, which in this case refers to the period 1971 to 2000. A standard ‘normal’ period is used to ensure that calculations of climate averages (the ‘normals’) are calculated on a consistent period. A 30-year period is considered long enough to calculate a representative average, and to reduce the impact that one-off, very extreme events (i.e. short term climate variability) have on the average. Meteorological Normals are usually provided for each decade, and thus are revised every 10 years, with the most recent 30 year period always being used.

The average yearly rainfall for most urban areas in New Zealand ranges between 600mm and 1500mm. The relatively low levels of rainfall which Christchurch experiences are due to the presence of the Southern Alps which form a massive barrier to the westerly air streams. Within Christchurch, there are two main climatic zones, the Port Hills and the Canterbury Plains. The Port Hills experiences higher humidity and greater seasonal variability than the Canterbury Plains, which are drier and have a more evenly distributed rainfall during the year.

Rainfall has a direct impact, not only on river and stream flows, but on the amount of water or recharge reaching the city’s aquifers. The Canterbury Plains themselves have relatively low rainfall and the normally fast-draining characteristics of the soils and rock mean large seasonal fluctuations in the soil moisture content. Rainfall recharge is therefore critical to maintain groundwater levels and thus the supply of water in these drier areas during spring and summer.

**Data limitations:**

There is no data available for Christchurch Botanic Gardens in 1980.

**What is the Council doing?**
- Promoting sustainable water use
- Set up Water Loss Reduction Programme
- Repairing Leaks

**What can you do?**
- Set up rainwater tanks to collect run-off
- Choose drought tolerant plants for dry areas
- Don’t let taps drip
approach on the basis that it would increase the maximum allowable zone load above what is currently leached. Ironically, as we have already noted PC6 as currently proposed would actually allow a significant increase in nitrogen leaching.

[385] The extent of that increase can be compared with the increase that would arise if a LUC approach was adopted. If it is assumed that all of the 25,000ha proposed to be irrigated by the RWSS falls evenly within LUC classes 1, 2 and 3, the total nitrogen leaching from those three categories of land, including current pre-irrigation leaching, would only be 683 tonnes of nitrogen per year. That can be compared with the 1,950 tonne/year catchment load increase proposed by HBRC.

[386] Ian Millner, Senior Land Management Advisor with HBRC, dismisses the use of LUC on the basis that it does not directly correlate to nutrient loss or the PMPs and FEMP proposed in PC6. However, rather than providing a reason why LUC should not be used, this simply reflects that LUC was not used as the basis for those PC6 derived plans. Mr Millner also contends that application of LUC rates would result in an increase in total catchment leaching. Of course this assumes that all farms within the catchment will somehow increase inputs and stocking rates regardless of the availability of water.

[387] The Board has difficulty with that assumption. Outside the areas to be irrigated the majority of the farmers in the catchment will already be maximising non-intensive production. In the absence of a secure water supply it would probably be difficult for stocking rates or intensification to be lifted to any significant extent. Thus higher leaching rates for those parts of the catchment are unlikely to have any environmental effect, and we do not find Mr Millner’s explanation for declining to adopt LUC based leaching rates compelling.

The Board’s conclusions as to the management of nitrogen

[388] Effective nitrogen management requires a two-pronged approach. The first component involves the setting of on-land root zone leaching limits which will serve as

188 I Millner, Evidence in Chief, paragraph 3.34.
189 I Millner, Evidence in Chief, paragraph 5.18 et seq.