

BEFORE THE HEARING COMMISSIONERS

IN THE MATTER

of the Resource Management Act 1991
("the Act")

AND

IN THE MATTER

of the Resource Management Act 1991
and the Environment Canterbury
(Temporary Commissioners and
Improved Water Management) Act 2010

**STATEMENT OF EVIDENCE BY VANCE ANDREW HODGSON
FOR HORTICULTURE NEW ZEALAND**

29 AUGUST 2014



ATKINS | HOLM | MAJUREY

Helen Atkins
PO Box 1585
Shortland Street
AUCKLAND 1140

CONTENTS

1. QUALIFICATIONS AND EXPERIENCE	1
2. SCOPE OF EVIDENCE.....	2
3. THE PLANNING FRAMEWORK	2
NPSFM 2014	3
A: Water Quality	4
Objective A2 – The Overall Quality of Freshwater	4
Policies A1, A2, A3 – Managing Freshwater Objectives, setting Limits and Adopting the Best Practicable Option.....	5
B Water Quantity	6
Objective B2	6
Objective B3	7
4. MY UNDERSTANDING OF HORTICULTURE NEW ZEALAND’S SUBMISSIONS.....	7
5. CHANGES TO THE ISSUE STATEMENT	9
6. A NEW SUB-REGIONAL POLICY.....	10
7. MINOR AMENDMENT.....	11
8. FARMING ENTERPRISES	11
9. DEFINING GOOD PRACTICE NITROGEN AND PHOSOPHOROUS LOSS RATES.....	17
10. TIMEFRAMES.....	18
11. BASELINE LAND USE AND NITROGEN BASELINE DEFINITIONS.....	19
12. TRANSFER OF WATER.....	20
Nitrogen Allocation.....	21
13. RELIABILITY	22
Policy 11.4.29	22
Policy 11.4.30	23
8.5 vs 9 out of 10 year Reliability	23
14. DEFINITION OF IRRIGATION SCHEME.....	25
15. REASONABLE USE.....	26
16. SCHEDULE 24.....	27
17. CONCLUSION	27

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My full name is Vance Andrew Hodgson. I am a director of Hodgson Planning Consultants Ltd, a resource management consultancy based in Waiuku. I have been employed in resource management related positions in local government and the private sector since 1994 and have been in private practice for 10 years. I hold a Bachelor of Resource and Environmental Planning (Hons) degree from Massey University.
- 1.2 For the public sector I was employed in student, assistant and senior policy planning roles by the Franklin District Council. I provided continuous in-house resource management consultancy services to the Papakura District Council from 2004 to 2010. Since 2010, I have been providing services to the Auckland Council. The scope of work for the public sector has been broad, covering plan change processes, submissions to national standards/regulations/policy statements and regulatory matters. Of note I was project manager and expert witness for rural plan changes in Franklin and Papakura, and provided rural subdivision advice to the Auckland Council for the preparation of the Proposed Auckland Unitary Plan.
- 1.3 I have worked in geographic information system positions in the United Kingdom and worked for CKL Surveying and Planning Limited in Hamilton.
- 1.4 In private practice I regularly advise a range of private clients on statutory planning documents and prepare land use, subdivision, coastal permit, water permit and discharge permit resource consent applications. I have considerable experience in resource consent applications, hearings and appeals on a range of activities, particularly for activities in the rural environment.
- 1.5 Living and working in the rural environment of South Auckland / North Waikato, I have had a continuous association with the rural production sector and in particular the horticultural industry. In recent years I have been providing resource management advice to Horticulture New Zealand on policy matters across New Zealand.
- 1.6 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My

qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

- 1.7 I am familiar with the Proposed Canterbury Land and Water Regional Plan and Variation 1 ("**Var1**") to that document, to which these proceedings relate.

2. SCOPE OF EVIDENCE

- 2.1 This evidence provides a planning assessment of those provisions on which Horticulture New Zealand submitted and addresses the Section 42A report prepared by Environment Canterbury and dated July 2014.

3. THE PLANNING FRAMEWORK

- 3.1 The relevant planning documents that Var1 must give effect to¹ are:

- (a) The National Policy Statement for Freshwater Management ("**NPSFM**");
- (b) The operative Canterbury Regional Policy Statement 2013 ("**RPS**").

- 3.2 The relevant planning documents that the Plan must not be inconsistent with² are:

- (a) The Canterbury Natural Resources Plan;
- (b) The Proposed Canterbury Land and Water Regional Plan;
- (c) The Water Conservation (Rakaia River) Order 1988; and
- (d) The National Water Conservation (Te Waihora/Lake Ellesmere) Order 1990.

¹ In accordance with Section 67 (3) of the RMA.

² In accordance with Section 67 (4) of the RMA.

- 3.3 The relevant planning documents that the Plan must have particular regard to³ are:
- (a) The Vision and Principles of the Canterbury Water Management Strategy ("**CWMS**").
- 3.4 The relevant planning documents that the Plan must take into account⁴ to are:
- (a) Mahaanui Iwi Management Plan 2013;
 - (b) Te Wairoa Joint Management Plan 2005; and
 - (c) Te Runanga o Ngai Tahu Freshwater Policy 1999.
- 3.5 Other statutory matters include:
- (a) The National Environmental Standard for Sources of Human Drinking Water 2007;
 - (b) Canterbury Earthquake Recovery Act 2011.
- 3.6 In setting out these documents I broadly agree with the analysis set out in Section 14.3 of Appendix 3 of Environment Canterbury's Section 32 Report dated February 2014 and the analysis in the Section 42A Report.
- 3.7 Given the general agreement I do not repeat the analysis of the applicability of those planning instruments or the compliance of Var1 with those instruments. Rather the evidence sets out where I depart from the views expressed in the Section 32 or Section 42A Reports or consider that an alternative planning provision would better give effect to, be not inconsistent with, or have regard to (as the case may be) the various relevant documents.

NPSFM 2014

- 3.8 As the section 42A report does not address the NPSFM2014, it is important that I consider this instrument relative to the issues raised by Horticulture New Zealand.
- 3.9 The legal status of the NPSFM 2014 relative to Var1, will be addressed by other parties at the hearing including legal counsel for Horticulture New Zealand.

³ In accordance with Section 63 of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010.

⁴ In accordance with Section 66 (2A) (a) of the RMA.

- 3.10 With those introductory comments and on the basis that the legal analysis is that the NPSFM 2014 is in force and must be considered now, I have set out my planning analysis of that policy in this section of my evidence.
- 3.11 I understand there is some uncertainty in regards to the status of Lake Elsmere/Te Waihora relative to the exclusions provided in the NPSFM for water quality limits for Intermittently Closing and Opening Lagoons (ICOLSs). This is not my area of expertise but I reach the conclusion that even if Te Waihora was an ICOL this would not affect my conclusions.
- 3.12 Key to considering whether Var1 gives effect to the new NPSFM, I focus on the following objectives and policies while not overlooking the relevance of the NPSFM in its entirety.

A: Water Quality

Objective A2 – The Overall Quality of Freshwater

- 3.13 The objective states:
- The overall quality of fresh water within a region is maintained or improved while:*
- a) *protecting the significant values of outstanding freshwater bodies;*
 - b) *protecting the significant values of wetlands; and*
 - c) *improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.*
- 3.14 The key outcomes specified in Objective A2 are that:
- The significant values of outstanding water bodies and wetlands are to be protected.
 - Degraded water bodies are to be improved.
- 3.15 As set out in the section 32 material, Lake Elsmere/Te Waihora is an outstanding freshwater body by definition of the NPSFM and pLWRP and the Selwyn/Te Waihora catchment contains degraded freshwater bodies.
- 3.16 Remaining water bodies (i.e. not outstanding freshwater bodies, wetlands, or degraded water bodies) are required to

be managed (sustainably – but not necessarily protected or improved at an individual level).

- 3.17 A balanced approach is required to achieve the bottom lines set out in Objective A2(a-c) while observing the intent of maintaining or improving the 'overall' quality of the regions fresh water.

Policies A1, A2, A3 – Managing Freshwater Objectives, setting Limits and Adopting the Best Practicable Option

- 3.18 The NPSFM requires that regional council's establish freshwater objectives and set freshwater limits for all freshwater management units.

- 3.19 Policy A1 states:

By every regional council making or changing regional plans to the extent needed to ensure the plans:

a) establish freshwater objectives in accordance with Policies CA1-CA4 and set freshwater quality limits for all freshwater management units in their regions to give effect to the objectives in this national policy statement, having regard to at least the following:

- i. the reasonably foreseeable impacts of climate change*
- ii. the connection between water bodies; and*
- iii. the connections between freshwater bodies and coastal water; and*

b) establish methods (including rules) to avoid over-allocation.

- 3.20 Var1 was notified after the new NPSFM was gazetted. The National Objectives Framework set out in section CA of the NPSFM was not followed. Notwithstanding this, the section 32 material identifies a process that considers the value setting approach for defining the freshwater objectives for Var1.

- 3.21 Of particular focus to the Horticultural sector is how the values of Mahi Mara / Cultivation are addressed in Var1. The values is set out as follows:

Appendix 1: National values and uses for fresh water

Additional Natural Values

Mahi māra / cultivation

Irrigation and food production – The freshwater management unit meets irrigation needs for any purpose.

Water quality and quantity would be suitable for irrigation needs, including supporting the cultivation of food crops, the production of food from domesticated animals, non-food crops such as fibre and timber, pasture, sports fields and recreational areas. Attributes will need to be specific to irrigation and food production requirements.

- 3.22 Based on the assessment below and in particular relying on the case studies presented by Horticulture New Zealand, and the evidence of Stuart Ford and Chris Keenan, it is not clear to me that these values have been sufficiently recognised. Noting the balanced consideration required under the RMA and importantly the need to have regard to the need to use water for economic and social well-being.
- 3.23 Policy A2 then requires out a programme for where freshwater objectives are not met. The section 32 material is again sufficient to identify that in this catchment targets are to be specified and methods (regulatory and non-regulatory) implemented to address contaminants within a defined timeframe.
- 3.24 Policy A3(b) requires the regional council to where permissible, make rules requiring the adoption of the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of any discharge of a contaminant into fresh water.
- 3.25 One of the best practicable options that has been highlighted in the section 32 and supported by Horticulture New Zealand is the introduction of methods relating to Good Management Practice Nitrogen and Phosphorous Rates (GMPNPLR) – discussed in depth in the evidence of Stuart Ford and Chris Keenan. The project to define GMPNPLR is yet to be completed yet in its absence Var 1 has proposed GMPNPLR policy and methods without understanding the impacts. I have concerns that in doing this the plan does not meet the requirements set out in s32 of the RMA.

B Water Quantity

Objective B2

- 3.26 Objectives B2 is unequivocally a clear, concise and directive objective of avoiding further over-allocation of freshwater and phasing out existing over allocation.
- 3.27 If the science proves that this catchment is over allocated then there is no debate.

- 3.28 If there is uncertainty I support a precautionary approach with the caveat that the policy and method platform should address the uncertainty and provide for adaption and change should the uncertainty be reduced over time.

Objective B3

- 3.29 Objective B3 is also clear, concise and directive and requires improvement and maximising efficient allocation and efficient use of water.
- 3.30 In my opinion Objective B2 and B3 should not be read in isolation of each other. In an over allocated situation water can still be efficiently used while addressing the over allocation. An example being the transfer of water permits which is provided for in Var1 but not in a method that in my opinion will support achieving this objective.

4. MY UNDERSTANDING OF HORTICULTURE NEW ZEALAND'S SUBMISSIONS

- 4.1 My assessment of the Horticulture New Zealand submission, is that there are several key matters of concern to the horticultural sector:
- (a) That the purpose of Var1 is not clear with cross purpose outcomes of seeking to reduce contaminants and meet new load limits for water bodies while providing for a significant new area of irrigation and intensification.
 - (b) That as a result of providing for the Canterbury Plains Water scheme, landowners in other parts of the water management unit are being compromised in terms of their opportunity cost, direct effects on their capital land values and reductions in flexibility or land use options.
 - (c) That the NPSFM has not appropriately been given effect to and in particular values associated with food production or cultivation values, values associated with food security, economic and social well-being, have not been appropriately assessed.
 - (d) There are deficiencies in the section 32 analysis in regards to the economic impacts of Var1 and issues

establishing a regulatory framework around a yet to be defined Good Management Practice approach.

- (e) That there are deficiencies in the science-based approach and modelling, highlighted by an interactive catchment model developed by the primary sector parties.
- (f) That there is a preferential nutrient allocation to CPW users, a resulting consequential cutback to those outside the CPW area and an issue of natural justice with growers outside of CPW not previously understanding the impact of CPW through prior consent processes.

4.2 Horticulture New Zealand sought the following decisions:

- Withdraw Variation 1, or
- Withdraw the parts of the Variation that do not relate to Community Irrigation Schemes, and/or
- Such other changes as are necessary to give effect to the matters raised in this submission, and/or
- Such other consequential changes as are necessary.

4.3 It is my opinion that withdraw is not an option. A resource management response is required that must deliver the most appropriate environmental outcome for the Selwyn Te Waihora catchment. This must include a mix of regulatory and non-regulatory methods and it is appropriate that the consented CPW activity is provided for in the response.

4.4 I am of the opinion that Var1 should be approved, subject to changes that will better deliver on the resource management outcomes sought. I have distilled the key changes falling out of the Horticulture New Zealand submission that I consider are necessary and these included:

- Changes to the issue statement;
- The introduction of a new sub-regional policy;
- Minor amendment;
- Farming enterprises;
- Defining Good Management Practice Nitrogen and Phosphorous Loss Rates;
- Timeframes;

- Baseline Land Use and Nitrogen Baseline Definitions;
- Transfer of Water / Nitrogen
- Reliability
- Defining / Providing for Irrigation Schemes
- Reasonable Use
- Schedule 24

4.5 In the Appendix to this evidence I have included a table of the all the Horticulture New Zealand submissions (using the summary of submissions prepared by officers) which sets out my position in relation to each submission. Horticulture New Zealand also submitted an extensive number of further submissions. As no formal summary of further submission is available (but I understand one is being prepared by officers) I have not provided a similar table for further submissions. I will address any specific relevant further submissions in this evidence but the main response to further submissions will be appropriately considered in my rebuttal evidence.

5. CHANGES TO THE ISSUE STATEMENT

5.1 The introduction to Section 11 – Selwyn Te Waihora introduces the particular issues for this area and is based on the Selywn-Waihora Zone Committee Implementation Programme Addendum (Zip Addendum) with reference to the Zone Committee's long term goal for the catchment.

5.2 It was the submission of Horticulture New Zealand (V1pLWRP – 1383) that this introductory text would be improved by describing the importance of the area for agriculture and food production for the social and economic wellbeing of the community. The new paragraph sought was as follows:

“Selwyn Waihora is an important area for agriculture and food production which provides significant employment in the area, both on-farm and in processing and service industries. The social and economic wellbeing of the community is reliant on the agricultural industry and it is important that it is retained so that communities can thrive.”

5.3 The recommendation in the section 42A report⁵ is that this text be incorporated in to the Plan along with changes

⁵ 9.19 Variation 1 pLWRP – Section 42A Report

suggested by CPW⁶ to further highlight the economic importance of agriculture in Selwyn Te Waihora.

- 5.4 I agree with the section 42A report recommendation, but make the note for completeness that this is not just an economic wellbeing issue (as is the focus of the report's comments), but also a social issue. Agriculture and food production is long established in Selwyn Te Waihora and a significant contributor to defining and supporting the social wellbeing of the area. These activities support a state of affairs where the basic needs of the populace can be met, income levels are enough to cover basic wants, local employment options are available and where there is easy access to social, medical, and educational services.

6. A NEW SUB-REGIONAL POLICY

- 6.1 Horticulture New Zealand (V1pLWRP – 1384) sought the introduction of new objective to the pLWRP to address the particular values in Selwyn Te Waihora sub-regional area for food production and the importance to the social and economic wellbeing of the community. Other submitters sought similar outcomes.
- 6.2 As correctly identified in the section 42A report, while an objective may give greater emphasis to the specific outcomes for this sub-regional area, the structure of the pLWRP is such that it relies on higher order regional-wide objectives and no new objective should be introduced.

Objective 4.10 of the pLWRP

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

- 6.3 The report writer goes on to suggest an option may be to consider the wording as the basis for a policy. I agree and in my opinion this is within scope of the submission that also seeks “*amended policies, rules, and methods consequentially.*”
- 6.4 The report writer notes that it is debatable whether this will add appreciable value over the existing, more detail

⁶ 9.14-9.15 Variation 1 pLWRP – Section 42A Report

policies⁷. I consider that it will add value and in particular will provide a course of action to achieve or implement the region-wide objectives set out in Section 3 of the pLAWP.

6.5 I recommend that the following new policy be included:

11.4.5a To restore the mauri of Te Waihora and its tributaries, while maintaining a prosperous land-based economy and thriving communities in the Selwyn Te Waihora Catchment.

7. MINOR AMENDMENT

7.1 It was identified by Horticulture New Zealand (V1pLWRP – 1386) that incorrect numbering was used in Variation 1 to refer to the definition section of the pLWRP. The error is noted in the s42A report as a minor error to be corrected⁸.

8. FARMING ENTERPRISES

8.1 In this section my evidence addresses the way in which Var1 provides for farming enterprises. The pLWRP defines a farming enterprise as follows:

Means an aggregation of parcels of land held in single or multiple ownership (whether or not held in common ownership) that constitutes a single operating unit for the purpose of nutrient management.

8.2 Practical examples of farming enterprises are provided in the case studies presented in evidence by Horticulture New Zealand.

8.3 Throughout its submission, Horticulture New Zealand suggested several changes to address nutrient management carried out by farm enterprises. The issue is expressed across several Horticulture New Zealand submissions and appears to highlight an interpretation difficulty and questions over consistency with other parts of the pLWRP.

8.4 As I understand it, the primary issue is that farm enterprises are a common activity in the Selwyn Te Waihora catchment, can and do manage nutrients and water across the enterprise to achieve a range of environmental outcomes and economic success.

⁷ 9.41 Variation 1 pLWRP – Section 42A Report

⁸ 22.6 Variation 1 pLWRP – Section 42A Report

8.5 The current format of the pLWRP and Var1 focuses nutrient management at a property level. The starting point for this approach lies in the planning document definitions.

8.6 The definition of a farming enterprise, as stated above, is an aggregation of parcels for nutrient management. The land may or may not be held in common ownership and there is no requirement for the land to be adjoining or contiguous.

8.7 Var1 introduces a definition of Baseline Land Use which reads:

Baseline Landuse means the land use, or uses, on a property between 1 July 2009 and 30 June 2013 used to determine a property's 'nitrogen baseline' as defined in section 2.10 of this Plan.

8.8 This new definition relies on the definition of 'property' in the pLWRP that reads:

Means any contiguous area of land, including land separated by a road or river, held in one or more than one ownership that is utilised as a single operating unit, and may include one or more certificates of title.

8.9 The Baseline Land Use definition is then used to define the Nitrogen Baseline over the 1 July 2009 - 30 June 2013 period around which the rule structure is promulgated. The Baseline Land Use definition would then apply across the entire pLWRP.

8.10 Horticulture New Zealand (V1pLWRP – 1387) sought to amend the definition of Baseline Land Use by adding after "property", the term "or farming enterprise⁹". The intent being to ensure nitrogen baselines can be calculated across a farming enterprise and go on to provide for nutrient management options across farm enterprises rather than at a property level that relies on contiguous land.

8.11 The Var1 policies support the property based assessment approach. In particular:

Policy 11.4.12:

Reduce discharges of nitrogen, phosphorus, sediment and microbial contaminants from farming activities in the catchment by requiring farming activities to:

⁹ 11.93 Variation 1 pLWRP – Section 42A Report

- (a) *Not exceed the nitrogen baseline where a property's nitrogen loss calculation is more than 15 kg of nitrogen per hectare per annum; and*
- (b) *Implement the practices set out in Schedule 24; and*
- (c) *Implement a Farm Environment Plan prepared in accordance with Schedule 7 Part A, from 1 July 2015, when a property is greater than 10 hectares and is within the Lake Area in the Cultural Landscape/Values Management Area; and*
- (d) ...

- 8.12 There appear to be no policies that address a farming enterprise system approach to nutrient management.
- 8.13 The 'property' based approach is then supported by specific rules including:
- Rule 11.5.7 – that provides for a farming activity to be permitted until 1 January 2017 subject to the N loss calculation for the property not exceeding 15kg/ha/yr or the nitrogen baseline and other conditions.
 - Rule 11.5.8 - that provides for a farming activity to be permitted after 1 January 2017 subject to the N loss calculation for the property not exceeding 15kg/ha/yr and other conditions.
 - Rule 11.5.9 - that provides for a farming activity to be restricted discretionary activity after 1 January 2017 where the N loss calculation for the property is greater than 15kg/ha/yr but not increased above the nitrogen baseline.
- 8.14 The rules are written so that the N loss calculation is property based and the nitrogen baseline is based on the Baseline Land Use definition which, as already highlighted, is also property based.
- 8.15 It is only Rule 11.5.10 that introduces a provision to consider discharges at a farm enterprises level and then as a discretionary activity status. Condition (b) requires the N loss calculation for the farming enterprise to not have increased above the nitrogen baseline. This is a confusing provision given this requires a property based assessment rather than the ability to assess the nitrogen baseline across the farming enterprise system. In other words the interrelationship is circular because of the definition Baseline Land Use.

- 8.16 The confusion is compounded by the references in Rules 11.5.11 - 11.5.13 that define a non-complying and prohibited activity status around N loss calculations for a property not increasing above the nitrogen baselines.
- 8.17 Requiring baseline landuse and thereby nitrogen baseline calculations to only be defined at a property level would appear to establish more complex administrative and management requirements than are necessary. The freshwater quality accounting system for the catchment are yet to be clarified and notwithstanding this I would assume it easier to deal with aggregated properties where possible than many more individual property situations. Requiring Farm Environmental Plans and duplicating administrative processes across multiple properties (not necessarily contiguous) used by growers will be costly and frustrating for Council and growers alike.
- 8.18 By definition, under the pLWRP and Var1, the primary difference between a property and farm enterprises is the non-contiguous nature of the land. In my opinion whether nutrient management calculations are undertaken at a property or farm enterprise level has no difference in relation to the environmental outcomes achieved. The catchment limits are based on a whole of catchment approach where all land is treated equal. Whether these limits are adhered to at a property or farm enterprises level is not relevant. What is relevant is achieving the limits and ensuring that an accounting system records and assesses progress to meeting the limits.
- 8.19 Through the Farming Enterprise provisions, the pLWRP and Var1 provide the ability to consider a single operating unit for the purposes of nutrient management. The issues raised by Horticulture New Zealand in their submission highlight that the Plan could be improved to reflect this intent.
- 8.20 In the pLWRP the current approach is as follows:
- Section 5 – Region Wide Rules: Rule 5.46 The use of land for a farming activity as part of a farming enterprise is a discretionary activity...*
- 8.21 ECAN have provided advice on the implementation of this rule as follows:
- “A farming enterprise is described in the plan as “an aggregation of parcels of land held in single or multiple ownership (whether or not*

held in common ownership) that constitutes a single operating unit for the purposes of nutrient management)".

Examples include a dairy platform and support block, or an arable farm with crops in rotation. The farming enterprise rule enables a farmer to connect geographically separated land parcels and manage the overall nitrogen loss from that operation, rather than managing the nitrogen loss on a per property basis.

Farmers operating under the farming enterprise rules should create a single nitrogen baseline for the entire operation and must ensure the nitrogen loss from the whole operation (the farming enterprise) does not exceed the baseline." (ECAN: Canterbury Land & Regional Plan, What Does it Mean? QA for Dairy Farmers, May 2014)

- 8.22 In my opinion the outcome sought by ECAN is clear but the Var1 approach is not.
- 8.23 I also query the discretionary activity status for Farming Enterprises in Var1. While I note that this is carried over from the pLWRP I am not clear on the rationale¹⁰. Full discretion appears unnecessary and I would propose that matters of discretion could be developed to support a restricted discretionary activity status.
- 8.24 Horticulture New Zealand is in consultation on the draft variation for the Hinds sub catchment. The draft document currently includes a rule for the use of land for a farming activity as part of a farming enterprise in the Upper Hinds/Hekeao Plains Area as a restricted discretionary activity. This is exactly what Horticulture New Zealand are seeking in relation to Var1.
- 8.25 The importance of recognising farming enterprises is also expressed by Horticulture New Zealand in their submission (V1pLWRP – 1388) on the definition of Good Management Practice Nitrogen and Phosphorous Loss Rates.
- 8.26 The definition as proposed required Good Management Practice Nitrogen and Phosphorous Loss Rates to be calculated on a 'property' basis. Horticulture New Zealand sought the definition be amended to include 'farming enterprises'¹¹.

¹⁰ 11.310 Variation 1 pLWRP – Section 42A Report

¹¹ 11.140 Variation 1 pLWRP – Section 42A Report

- 8.27 It is the recommendation of the Section 42A report that this definition be deleted in its entirety¹². I return to this matter below but note that if it is the decision of the commissioners to retain this definition then the amendments I propose in attachment 1 would address this matter. The amendments suggest the activity status of Rule 11.5.10 be changed to a restricted discretionary activity, matters of discretion listed and a note to advise that:

For the purposes of assessing Baseline Land Use, Good Management Practice Nitrogen and Phosphorous Loss Rates, Nitrogen Baseline and the Nitrogen Loss Calculation, the assessment will be across the entire Farming Enterprise and not by property.

- 8.28 This approach maintains consistency with the region wide provisions for farming enterprises, an issue of concern expressed in the section 42A report¹³.
- 8.29 The issue carries on through to Policy 11.4.12 where the policy seeks to limit a 'property's' nitrogen loss calculation and makes no provision for 'farming enterprises'. Horticulture New Zealand (V1pLWRP – 1392 & 1393) sought that the term 'farming enterprises' be added to the policy and also that the policy text requirement to "Reduce the discharge of nitrogen, sediment, phosphorous and microbial contaminants from farming activities into the catchment by:.. be changed to a policy to Manage the discharge...
- 8.30 I propose that a new distinctive policy would be more appropriate to provide for farming enterprises as a method to support nutrient management outcomes. To read as follows or follows (or similar):

Managing land use to Improve Water Quality

11.4.## Provide for nutrients to be managed across farming enterprise systems as a single operating unit and require for any farming enterprise:

- *A Farm Environment Plan prepare in accordance with Schedule 7 Part A.*
- *The nitrogen loss calculation for the farming enterprise to not increase above the nitrogen baseline for the entire farming enterprise.*

¹² 11.150 Variation 1 pLWRP – Section 42A Report

¹³ 11.310 Variation 1 pLWRP – Section 42A Report

9. DEFINING GOOD PRACTICE NITROGEN AND PHOSPHOROUS LOSS RATES

9.1 As I understand it, there is general agreement between Council and the primary sector that Good Management Practice Nitrogen and Phosphorous Loss Rates ("**GMPNPLR**") should be introduced into the plan upon completion of the Matrix of Good Management practice project. This being an outcome sought by the Zone Committee¹⁴.

9.2 This outcome is codified into the plan by region-wide policy 4.11:

Acknowledging the pivotal role of good management practices in the sustainable management of the Region's water bodies, good management practice will be codified and introduced into this Plan by way of a plan change on or before 30 October 2016.

9.3 Var1 then imbeds GMPNPLR through; the new definition, Policy 11.4.13; restricted discretionary activity criteria in 11.5.9; and schedule 7 – farm environment plans.

9.4 As identified by Horticulture New Zealand (V1pLWRP – 1545) and others, in the absence of GMPNPLR being confirmed, the proposed definition and Policy 11.4.13 is redundant. The matter is also raised in Horticulture New Zealand (V1pLWRP – 1419).

9.5 I concur with the recommendation in the Section 42A report to delete the definition of GMPNPLR. It is more efficient and effective to use the coming (prior 30 October 2016) process to develop a cohesive set of provisions, rather than introduce a definition ahead of that plan change.

9.6 Horticulture New Zealand suggested that an amendment to Policy 11.4.13 should remove the reference to GMPNPLR and only require the preparation of a FEP from 2017. Horticulture New Zealand (V1pLWRP – 1403) sought the deletion of Policy 11.4.14, or that the policy be amended to take into account revised assessments that are developed through the process to better reflect the impact on jobs and economic development opportunities.

9.7 As noted in the section 42A report GMPNPLR will be a cornerstone method of achieving the nutrient management outcomes sought in Canterbury. However, as set out in the

¹⁴ 4.79Variation 1 pLWRP – Section 42A Report

evidence Chris Keenan the implications of GMPNPLR are likely to be significant and when known with accuracy should inform an appropriate policy and method response. In my opinion it is not appropriate to do this outside of another plan change process.

10. TIMEFRAMES

- 10.1 Case studies highlight the effect of the current timeframes on existing land users.
- 10.2 The submissions by Horticulture New Zealand identified a desire for longer timeframes. The submitter's concern is that the intergenerational nature of overallocation and water quality degradation should be addressed by setting longer timeframes for transition to manage within limits perhaps an intergenerational timeframe.
- 10.3 To recap the key dates in Var1 are:
- pLWRP: Policy 4.1 Lakes, rivers, wetlands and aquifers will meet the fresh water outcomes set in Sections 6 to 15 within the specified timeframes. If outcomes have not been established for a catchment, then each type of lake, river or aquifer will should meet the outcomes set out in Table 1 by 2030.
 - Var1: 1 January 2017. Implement FEPS, GMPNPLR.
 - Var1: 1 January 2022. Percentage reductions in N Loss as per Policy 11.4.14 (but also a matter of discretion for post 1 January 2017 Rule 11.5.9)
 - Var1: 2037. Prohibit leaching of more than 80kg/ha/yr.
- 10.4 The 2037 date provides an absolute limit in the form of Policy 11.4.16 and Rule 11.5.13 that prohibits N loss greater than 80 kg/ha/yr. It is the submission of Horticulture New Zealand (V1pLWRP – 1549) that Policy 11.4.16 should be deleted and replaced with a more flexible set of instruments to manage within limits. For example Horticulture New Zealand is seeking the introduction of a nitrogen transfer system. In addition the timeframe is not considered appropriate to reduce N or significant alternative mitigation measures may become available in the future to manage contaminants.
- 10.5 On the matter of nitrogen transfers I note the evidence of Stuart Ford and Chris Keenan and am also of the opinion

that a nitrogen transfer system can assist with achieving the objectives for this catchment and the NPSFM.

- 10.6 On the matter of other time frames I note that in the absence of defining GMPNPLR and some apparent uncertainty in the model results it is important to provide a review step to ensure refinements in methodology and models used are reflected in the allocation and targets and limits set.
- 10.7 The Section 42A report provides useful analysis around the use of a prohibited activity status. While I am sympathetic regarding the effect that a prohibited activity status has on land users I am of the opinion that prohibiting N loss greater than 80 kg/ha/yr is appropriate in this circumstance. I note that the 2037 date is over 20 years away and while there is uncertainty around limit setting, there are other unknowns, including changing technologies that may assist with meeting the limits and/or future plan changes that may change the approach.
- 10.8 The prohibited activity issue is also raised by Horticulture New Zealand (V1pLWRP – 1545) in regards to Rule 11.5.12 whereby an activity with an N loss calculation increases above the nitrogen baseline is a prohibited activity. This submission of Horticulture New Zealand is predicated on the uncertainty of the science in the catchment model. If the numbers in the tables are incorrect or to be altered, then it would appear prudent to me to revisit the prohibited activity status.

11. BASELINE LAND USE AND NITROGEN BASELINE DEFINITIONS

- 11.1 The pLWRP defines sets limits by specifying a 2009 to 2013 benchmark period for nitrogen losses from farming activities (the nitrogen baseline).
- 11.2 Var1 introduces a new definition for Baseline Land Use that benchmarks a properties land use between the 2009 to 2013 period for the purposes of determining a property's nitrogen baseline.
- 11.3 Relying on the evidence of the case studies, Stuart Ford and Chris Keenan I am of the opinion that no other land use activity is affected as significantly by this proposed definition

and the resulting benchmarking than the horticultural sector in Selwyn Te Waihora.

- 11.4 The Section 42a report¹⁵ reaches the conclusion that it is beyond scope to amend the definition of the nitrogen baseline. I leave this to legal review. I concur with the statement that adopting the highest discharge rate over the baseline period rather than the average could lead to an increase in the catchment load¹⁶. However, there are inaccuracies in the science defining the load, Overseer version control issues¹⁷ and inequities through adopting this approach. I also note that the implementation of this method is resulting in ECAN adopting some discretion¹⁸. If this is the practice then in my opinion it should be the rule or a defined matter of discretion.
- 11.5 The new Baseline Land Use definition is fundamental to the operation of Var1 beyond 2017. With the exclusion of the suggested addition of farming enterprises to the definition of Baseline Land Use, Horticulture New Zealand proposed no other changes. However, it is my opinion based on the evidence from the horticultural sector that the particular distinction of horticultural activities makes the baseline land use definition unworkable.
- 11.6 As highlighted in the evidence of Chris Keenan and Stuart Ford, a four year benchmarking period is not truly representative of the typical land use activities of the horticultural sector. In my opinion the Var1 must address this. The most practical way to do this is at a policy level and in the matters of discretion. This was suggested by Horticulture New Zealand (V1pLWRP – 1399) and I agree with the suggestion.

12. TRANSFER OF WATER

- 12.1 The section 42A report identifies that on average around 50% of the allocated volume of water in Selwyn Te Waihora catchment is used¹⁹.

¹⁵ 11.111 Variation 1 pLWRP – Section 42A Report

¹⁶ 11.109 Variation 1 pLWRP – Section 42A Report

¹⁷ Refer evidence of Chris Keenan and Stuart Ford

¹⁸ 11.108 Variation 1 pLWRP – Section 42A Report

¹⁹ 13.4/14.52 Variation 1 pLWRP – Section 42A Report

- 12.2 One of the concerns of Ecan is the conversion of the allocated but unused 'paper water' to 'wet water' through the transfer of surplus water around the catchment. A performance standard is proposed supporting a restricted discretionary activity status for water transfers that requires 50% of the water permit to be surrendered.
- 12.3 Horticulture New Zealand (V1pLWRP – 1417) and others have raised concerns with the 50% reduction. I support the requirement for a partial surrender if the catchment is over allocated. It is not an efficient use of water that is unallocated but not used over a long term period to be locked up and not available for other users.
- 12.4 I do not have experience in the water transfer system but do in transferable development rights associated with rural subdivision. In my experience if the disincentives are too high the market will not be attracted to use the method. The 50% reduction is a significant disincentive.
- 12.5 It is my recommendation that a reduction be signalled in the method but that the volume be a matter over which exercise of discretion should be restricted rather than a performance standard. I note this was the decision of the commissioners on the pLWRP.

Nitrogen Allocation

- 12.6 The issues with nutrient allocation approach are set out in the evidence of Stuart Ford and Chris Keenan. Horticulture New Zealand is supportive of a mixed allocation model and I agree with that approach. I also agree with the evidence of Mr Keenan that a model that can allow for transfer (not necessarily trading) is a simple way to provide for land use flexibility over time. Land use flexibility being of critical importance to the horticultural sector.
- 12.7 The existing allocation approach of Var1 is described in the section 42A report as being consistent with the pLWRP²⁰. I concur, but this does not close the door on considering other options to achieve the nutrient management outcomes, particularly in a catchment as diverse and changing in rural productive land use as Selwyn Te Waihora.

²⁰ 11.38 Variation 1 pLWRP – Section 42A Report

- 12.8 Should a nutrient transfer system be agreeable to the commissioners it is my opinion that an approach where similar land is allocated similar nutrients is appropriate.
- 12.9 The evidence of Stuart Ford and Chris Keenan suggests that locking in one allocation system now may not be the best long term approach. An approach could be to include a policy through Var1 that ensures the Council will work with the primary sector to develop a nutrient transfer system prior to the establishment of a reduction to improve the efficiency of nutrient use and provide for enhanced ability to achieve compliance with farm environmental plans (i.e. to manage within limits). The approach to be implemented before the critical date of 1 January 2022.

13. RELIABILITY

Policy 11.4.29

- 13.1 Policy 11.4.29 provides consideration where there is a significant loss of reliability due to the minimum flow and restrictions regime in Table 11(c). The critical nature of water reliability for the horticultural sector is set out in the evidence of Stuart Ford. Policy 11.4.29 does not guarantee the established reliability will continue but provides for a reasoned assessment of the effects associated with a continued take (effects on the environment and effects on rural production). I consider this a sound approach, particularly given the variability in the large catchment of water supplies and uncertainty around the models.
- 13.2 I note the section 42A report now queries the need for the policy and recommends the policy be deleted²¹. The concern being that:
- 2025 provides 10yrs to meet the revised minimum flow or use 11.4.30 and move to a groundwater source that is not stream deleting.
 - Low flows are expected to improve by 2025 with CPW.
 - Retaining policy 11.5.29 would require a more lenient rule framework and create risks where the applicants

²¹ 13.164 Variation 1 pLWRP – Section 42A Report

may seek to revisit the minimum flow itself (not just the date).

- 13.3 As described in the evidence of Stuart Ford, the horticultural sector has no alternative to the key input of water. Providing broad policy support to consider the loss of reliability is in my opinion appropriate.

Policy 11.4.30

- 13.4 I understand the intent of Policy 11.4.30 is to provide the option for surface water and stream depleting groundwater takes to transfer to deeper groundwater that is not stream depleting and therefore not subject to minimum flow restrictions.
- 13.5 It was the concern of Horticulture New Zealand (V1pLWRP – 1409) that the policy as drafted would impact on existing consent holders and would only enable the continued taking of groundwater subject to onerous conditions.
- 13.6 The section 42A report clarifies that intent of the policy is not to apply in all circumstances such that there are no surface or shallow groundwater takes. Rather the policy is intended to prove options and support a shift away from stream abstraction.
- 13.7 Changes are recommended in the section 42a report²² to make the outcome sought clearer and I support the recommendation.

8.5 vs 9 out of 10 year Reliability

- 13.8 Var1 introduces an 8.5 out of 10 year reliability for a system with an application efficiency of 80%. This differs from the 9 out or 10 year factor in the pLWRP and is opposed by Horticulture New Zealand (V1pLWRP – 1406, 1407, 1557).
- 13.9 The section 42A report identifies that the modelled solution to progressively bring the catchment over allocation down to the limits proposed (and therefore meet the flow and ecological outcomes) is a package and has the following components.

²² 13.179 Variation 1 pLWRP – Section 42A Report

- Targeted Stream Augmentation (TSA) of 900 L/s in summer and 200 L/s in winter added to the local shallow groundwater system above the lowland streams in the Rakaia-Selwyn Combined Surface and Groundwater Allocation Zone;
- Managed Aquifer Recharge (MAR) 2m³/s supplied to the groundwater system across the top of the upper plains area in winter when alpine water is most likely to be available;
- 60,000 ha land is irrigated with alpine surface water in the upper plains supplied by Central Plains Water providing additional land surface recharge;
- 30,000 ha of groundwater irrigation to be replaced as part of the 60,000 ha of Central Plains Water supplied land;
- Abstraction limited to an allocation volume that meets climate driven demand in 8.5 years out of 10. This means consent holders are rationalised to an annual volume that represents the 8.5 out of 10 year demand for their particular land use; and
- Ecological flows of as close to 90% natural 7DMALF as possible met in the lowland streams.

13.10 As set out, this is a packaged solution, reliant on achieving all elements. The concern for the horticultural sector is that there are significant uncertainties around when or if some of these factors will be actioned e.g. targeted stream augmentation and managed aquifer recharge.

13.11 The action for growers is that total abstraction becomes limited to an allocation volume that meets climate driven demand in 8.5 years out of 10. As set out in the evidence of Stuart Ford, Chris Keenan and case studies, the impact is significant. These land users have no alternatives, no water means crops die or are not fit for market. This results in lost income and constraints on food supply to market. There are no alternatives for this sector and in my opinion the decision making around allocation must address the industry specific issues.

13.12 The issues identified above and the evidence of Stuart Ford suggest that there is a need for Var1 to specifically address crop survival water. A specific policy and method addressing this matter may alleviate the concerns of the

submitter with the way water reliability is managed. An example is the approach adopted in the Ruataniwha Dam decision whereby survival water was guaranteed for fruit trees. A similar approach would need to be adapted for the Canterbury situation to address the crop specific requirements set out in the evidence of Stuart Ford.

14. DEFINITION OF IRRIGATION SCHEME

- 14.1 Irrigation schemes are provided for in Policy 11.4.17 and Rules 11.5.14, 11.5.15 and 11.5.17. Irrigation schemes by their nature provide for a collaboration of farming activities to make use of a common water resource. The structure of the plan is such that irrigation schemes are a permitted activity where they are listed in Table 11(j), hold a discharge consent (11.5.14) or obtain consent as a discretionary activity (11.5.15) and the N loss calculation does not exceed the limits specified in Table 11(j). Only one entry is provided in Table 11(j) being Central Plains Water.
- 14.2 Horticulture New Zealand (V1pLWRP – 1415) identified that the listing of additional irrigation schemes in Table 11(j) would require a plan change. There is no particular discussion on this in the section 42A report other than a comment that this is an interpretation by Horticulture New Zealand²³.
- 14.3 The issue Horticulture New Zealand seeks to address is that the irrigation scheme provisions should provide for collaborative water resource options across farming enterprises, which provide for collective nutrient management. I agree and as previously stated, the ability to manage nutrients and water collectively across a farming enterprise will lead to better resource management. Var1 would require a new irrigation scheme to operate within an allocation determined by the aggregation of the baselines within the scheme unless a plan change determined a new allocation and this was included in Table 11(j).
- 14.4 The section 42A Report provides broader commentary on the potential disjoint between the present over-allocation status of nutrients in the catchment and the likely addition of further nutrient from a significant irrigation scheme but notes that the balance of actions is appropriate to address this

²³ 11.186 Variation 1 pLWRP – Section 42A Report

matter. The setting of an allocation limit for a new irrigation scheme would also need to address this matter.

- 14.5 The testing of a potential new load limit for an irrigation scheme (within the overall catchment limit) should in my opinion be an option. Rule 11.5.12 would make this a prohibited activity. I do not agree with this approach and consider that an effects based assessment for a non-complying activity under s104D to be appropriate. An effects based assessment provides for changing science and better information to be considered in the future. A prohibited activity status ruler this consideration out completely.
- 14.6 A better approach would be to define an irrigation scheme as a group of users managing land within a cap set for nutrients or water use within a connected consent framework, leave Rules 11.5.14 and 11.5.15 unchanged and include a new non-complying activity for irrigation schemes not listed in Table 11(j). This would allow an application to be made to share a load between a group of users (water or nutrients) and for that load to be determined not by the baseline approach but a consideration of other factors (including nitrogen transfers, alternative allocation options).

15. REASONABLE USE

- 15.1 Water allocation for irrigation in the pLWRP is predicated on demonstrating demand by 'reasonable use' in terms of Schedule 10. The term reasonable use is defined and then then referenced throughout the pLWRP (Objective 3.9, Policy 4.53, 4.61, 4.63, Rule 5.123, 5.128).
- 15.2 Somewhat confusingly, Var1 introduced the term 'demonstrated use' in Policy 11.4.23. Horticulture New Zealand requested that it be stated how demonstrated use would be assessed²⁴. The section 42a report suggests replacing the term demonstrated use with reasonable use and thereby tying Policy 11.4.23 to Schedule 10 (Reasonable Use Test). I agree with this approach²⁵ and also the suggestion that Policy 11.4.23 and 1.4.26 be combined to

²⁴ No reference in summary of submissions

²⁵ 13. Variation 1 pLWRP – Section 42A Report

ensure the method for calculating volumes is that same members and non-members of an irrigation scheme.

- 15.3 An approach based on demonstrated use has the potential to result in a 'use it or lose it' mentality, which will not encourage reduced water use, particularly if farmers see that they have to over-use water to ensure sufficient allocation to support their operations in drier years.
- 15.4 In terms of the recommended combination of Policy 11.4.23 and 1.4.26, Horticulture New Zealand's opposition to the 8.5 and 10 year reliability is again reiterated.

16. SCHEDULE 24

- 16.1 Horticulture New Zealand (V1pLWRP – 1421) expressed general support for the Farm Practice requirements set out in Schedule 24, noting that this is an interim approach until GMPNPLR is development. Of concern raised by submitters and supported by Horticulture New Zealand is the imposition of a default requirement for a 2m uncultivated vegetation strip.
- 16.2 Rather than expressing this as a standard it would be better that this became more responsive to the environmental conditions of the site. A site with topography that ensures no potential runoff of contaminants into an adjacent waterbody will not require an additional buffer. Crop type and seas only activity may also affect the risk of runoff and dictate wider or narrower buffers.
- 16.3 Amendments are suggested in the attachments to provide the flexibility to respond to the environmental conditions and address the most recent Code of Practice methods that have been employed to reduce overland flow and loss of phosphorous / soil.

17. CONCLUSION

- 17.1 The following provisions of the Plan included in Attachment 1 should be amended as proposed for the reasons set out in the body of this evidence.

Vance Hodgson

August 2014

ATTACHMENT 1

Provisions Proposed to be Amended

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
52267	Horticulture New Zealand	V1pLWRP-1382	Proposed Variation 1 to the Proposed Canterbury Land and Water Regional Plan	Oppose	Withdraw Variation or withdraw the parts of the Variation that do not relate to Community Irrigation Schemes.	Accept with recommended changes.
52267	Horticulture New Zealand	V1pLWRP-1383	Section 11 - Selwyn Waihora	Oppose	Amend Section 11 by adding a new paragraph: <u>Selwyn-Waihora is an important area for agriculture and food production which provides significant employment in the area, both on- farm and in processing and service industries. The social and economic wellbeing of the community is reliant on the agricultural industry and it is important that it is retained so that the communities can thrive.</u>	The recommendation in the section 42A report ¹ is that this text be incorporate in to the Plan along with changes suggested by CPW ² to further highlight the economic importance of agriculture in Selywn Te Waihora.
52267	Horticulture New Zealand	V1pLWRP-1384	Section 11 - Selwyn Waihora	Oppose	No specific decision requested. Add a new Objective and to recognise and provide for the nationally significant benefits of food and fibre production and their contribution to economic, social and cultural wellbeing. Amend policies, rules, and methods consequentially.	Suggest a new policy rather than an objective, noting section 42a comment ³ . To restore the mauri of Te Waihora and its tributaries, while maintaining a prosperous land-based economy and thriving communities in the Selwyn Te Waihora Catchment.
52267	Horticulture New Zealand	V1pLWRP-1386	11.1a	Oppose	Amend references to 2.10 to 2.9.	Minor amendment.
52267	Horticulture New Zealand	V1pLWRP-1387	11.1a	Oppose	Amend the definition of 'Baseline Land Use' by adding after 'property': 'or farming enterprise'.	Or in the alternative amend Rule 11.5.10 as follows: <i>The use of land for a farming activity as part of a farming enterprise in the Selwyn Te Waihora catchment is a <u>restricted</u> discretionary activity, provided the following conditions are met:</i> <i>1. A farm environmental plan has been prepared in accordance with schedule 7 part a: and</i> <i>2. The nitrogen loss calculation for the farming enterprise has not increased above the nitrogen baseline.</i> <i>The exercise of discretion is restricted to the following matters:</i> <i>1. The quality of compliance with the Farm</i>

¹ 9.19 Variation 1 pLWRP – Section 42A Report

² 9.14-9.15 Variation 1 pLWRP – Section 42A Report

³ 9.41 Variation 1 pLWRP – Section 42A Report

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
						<p><i>Environment Plan; and</i></p> <p>2. <i>The nitrogen load target for farming activities in Table 11(i); and</i></p> <p>3. <i>The potential benefits of the activity to the applicant, the community and the environment.</i></p> <p>4. <i>The rotational nature of the operation and industry good management practices.</i></p> <p><i>Note: For the purposes of assessing Baseline Land Use, Good Management Practice Nitrogen and Phosphorous Loss Rates, Nitrogen Baseline and the Nitrogen Loss Calculation, the assessment will be across the entire Farming Enterprise and not by property.</i></p>
52267	Horticulture New Zealand	V1pLWRP-1388	11.1a	Oppose	Amend the definition of 'Good Management Practice Nitrogen and Phosphorous Loss Rates' by adding after 'property': 'or farming enterprise'.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1389	11.4.6	Oppose	Amend Policy 11.4.6 as follows: Limit Reduce the total nitrogen load entering Te Waihora/ Lake Ellesmere by restricting reducing the losses of nitrogen from farming activities, industrial and trade processes and community sewerage systems in accordance with the target (the limit to be met over time) and limits in Table 11(i).	In the absence of defining GMPNPLR and some apparent uncertainty in the model results it is important to provide a review step to ensure refinements in methodology and models used are reflected in the allocation and targets and limits set.
52267	Horticulture New Zealand	V1pLWRP-1391	11.4 Policies	Oppose	Amend to include a new policy: <u>"Targets and limits set in this variation will be reviewed before 2017 to ensure that the refinements in methodology and models used are reflected in the allocation and targets and limits set."</u>	In the absence of defining GMPNPLR and some apparent uncertainty in the model results it is important to provide a review step to ensure refinements in methodology and models used are reflected in the allocation and targets and limits set.
52267	Horticulture New Zealand	V1pLWRP-1392	11.4.12	Oppose	Amend Policy 11.4.12 by replacing 'Reduce' with ' <u>Manage</u> '.	<p>Propose a new policy</p> <p><i>Managing land use to Improve Water Quality</i></p> <p><i>11.4.## Provide for nutrients to be managed across farming enterprise systems as a single operating unit and require for any farming enterprise:</i></p> <ul style="list-style-type: none"> • <i>A Farm Environment Plan prepare in accordance with Schedule 7 Part A.</i> • <i>The nitrogen loss calculation for the farming enterprise to not increase above the nitrogen baseline for the entire farming enterprise.</i>

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
52267	Horticulture New Zealand	V1pLWRP-1393	11.4.12	Oppose	Amend Policy 11.4.12 by adding after 'property': ' <u>or farming enterprise</u> '.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1399	11.4 Policies	Oppose	Amend to include a new policy: " <u>The nitrogen baseline for a property or enterprise can be re-assessed where it can be demonstrated that the 4 years 2009-2013 do not accurately reflect the nature of the operation.</u> "	A 4 year benchmarking period is not truly representative of the typical activities of the horticultural sector.
52267	Horticulture New Zealand	V1pLWRP-1403	11.4.14	Oppose	Delete Policy 11.4.14., or amend the policy to take into account revised assessments that are developed through the process to better reflect the impact on jobs and economic development opportunities.	The GMPNPLR are yet to be developed so that effects of this policy cannot be determined. Given the uncertainty a tool that is currently in development should not be implemented in a regulatory manner without an understanding the implications of the method.
52267	Horticulture New Zealand	V1pLWRP-1404	11.4.16	Oppose	Delete Policy 11.4.16. Replace the policy with a more flexible set of instruments to manage within limits.	Retain in the absence of an alternative allocation policy.
52267	Horticulture New Zealand	V1pLWRP-1405	11.4 Policies	Oppose	No specific decision requested. Add a new policy and commensurate permitted activity rules and methods to enable transfer of nitrogen within and between enterprises and farms within the same water management unit, or similar rules and methods to give effect to development of a transfer system.	Should a nutrient transfer system be agreeable to the commissioners an approach where similar land is allocated similar nutrients is appropriate. The approach to be implemented before the critical date of 1 January 2022. An approach could be to include a policy through Var1 that ensures the Council will work with the primary sector to develop a nutrient transfer system prior to the establishment of a reduction to improve the efficiency of nutrient use and provide for enhanced ability to achieve compliance with farm environmental plans (i.e. to Manage within limits).
52267	Horticulture New Zealand	V1pLWRP-1406	11.4.25	Support	Retain Policy 11.4.25.	Retain 9 year out of 10 reliability.
52267	Horticulture New Zealand	V1pLWRP-1407	11.4.26	Oppose	Amend Policy 11.4.26 to a reliability factor of 9 years out of 10.	Retain 9 year out of 10 reliability.
52267	Horticulture New Zealand	V1pLWRP-1408	11.4.29	Oppose	No specific decision requested. Ensure that any assessment under Policy 11.4.29 considers all relevant values and objectives.	Retain the policy as proposed.
52267	Horticulture New Zealand	V1pLWRP-1409	11.4.30	Oppose	Delete 11.4.30 (b).	The section 42A report clarifies that intent of the policy is not to apply in all circumstances such that there are no surface or shallow groundwater takes. Rather the policy is intended to prove options and

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
						support a shift away from stream abstraction. Changes are recommended in the section 42a report ⁴ to make the outcome sought clearer.
52267	Horticulture New Zealand	V1pLWRP-1410	11.5.7	Oppose	Amend Rule 11.5.7 by adding after the word 'property': 'or farming enterprise'.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1411	11.5.8	Oppose	Amend Rule 11.5.8 by adding after the word 'property': 'or farming enterprise'.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1412	11.5.9	Oppose	Amend Rule 11.5.9 by adding after the word 'property': 'or farming enterprise', and delete Matters of discretion 2 and 3.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1413	11.5.10	Oppose	Delete Rule 11.5.10 or provide a Restricted Discretionary Activity Rule for farming enterprises that takes into account the rotational nature of the operation and industry good management practices.	Or in the alternative amend Rule 11.5.10 as above.
52267	Horticulture New Zealand	V1pLWRP-1414	11.5.12	Oppose	Delete Rule 11.5.12 and combine with Rule 11.5.11	If the numbers in the tables are incorrect or to be altered, then it would appear prudent to me to revisit the prohibited activity status.
52267	Horticulture New Zealand	V1pLWRP-1415	11.5.14	Oppose	Amend Rule 11.5.15 (1) and (2) by deleting "listed in Table 11 (j)".	Define an irrigation scheme as a group of users managing land within a cap set for nutrients or water use within a connected consent framework, leave Rules 11.5.14 and 11.5.15 unchanged and include a new non-complying activity for irrigation schemes not listed in Table 11 (j). This would allow an application to be made to share a load between a group of users (water or nutrients) and for that load to be determined not by the baseline approach but a consideration of other factors (including nitrogen transfers, alternative allocation options).
52267	Horticulture New Zealand	V1pLWRP-1416	11.5.33	Oppose	Retain Rule 11.5.33.	Support retention subject to changes suggested to Policy 11.4.30 in the section 42A report.
52267	Horticulture New Zealand	V1pLWRP-1417	11.5.37	Oppose	Delete Rule 11.5.37(4)	Delete Rule 11.5.37(4)
52267	Horticulture New Zealand	V1pLWRP-1418	Proposed Variation 1 to the Proposed Canterbury Land and Water Regional Plan	Oppose	No specific decision requested. Submitter seeks to construct a new rule and method framework to support the policy requested on transfer of nutrients.	Should a nutrient transfer system be agreeable to the commissioners an approach where similar land is allocated similar nutrients is appropriate. The approach to be implemented before the critical date of 1 January 2022.

⁴ 13.179 Variation 1 pLWRP – Section 42A Report

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
						An approach could be to include a policy through Var1 that ensures the Council will work with the primary sector to develop a nutrient transfer system prior to the establishment of a reduction to improve the efficiency of nutrient use and provide for enhanced ability to achieve compliance with farm environmental plans (i.e. to Manage within limits).
52267	Horticulture New Zealand	V1pLWRP-1419	Schedule 7 – Farm Environment Plan	Oppose	Delete Schedule 7 bullet point 2 'Achieve the Good Management Practice Nitrogen and Phosphorus Loss Rates from 2017', and delete Schedule 7 bullet point 3: Further reduce nitrogen loss rates from 2022 where a property's nitrogen loss calculation is greater than 15 kg of nitrogen per hectare per annum.	The GMPNPLR are yet to be developed so that effects of this policy cannot be determined. Given the uncertainty a tool that is currently in development should not be implemented in a regulatory manner without an understanding the implications of the method.
52267	Horticulture New Zealand	V1pLWRP-1420	Schedule 10 - Reasonable Use Test	Oppose	No specific decision requested. Submitter seeks to amend Schedule 10 to better reflect horticultural seasonal irrigation demand. Where the use is a renewal of an existing consent the data from previous use should form a basis of the calculations.	Retain 9 year out of 10 reliability.
52267	Horticulture New Zealand	V1pLWRP-1421	Schedule 24 – Farm Practices	Oppose	Retain Schedule 24 and clarify that it relates specifically to Selwyn-Waihora.	Retain Schedule 24. Amend (d) Cultivation as follows: (i) For all cultivation adjacent to any river, lake, artificial watercourse (excluding irrigation canals or stock water races) or a wetland, an uncultivated vegetative strip is maintained between the waterbody and the cultivation activity. The requirement for the uncultivated vegetation strip to depend on the environmental conditions (e.g. topography, crop type, season) and the width responding to the most recent Code of Practice methods that have been employed to reduce overland flow and loss of phosphorous / soil.
52267	Horticulture New Zealand	V1pLWRP-1544	11.1a	Oppose	Amend to ensure that the nitrogen baseline is based on the highest year between 2009-2013, not the rolling average. [A decision is yet to be made by the Hearing Commissioners on whether this is a valid submission point.]	There are inaccuracies in the science defining the load, overseer version control issues and inequities through adopting this approach. The implementation of this method is resulting in ECAN adopting some discretion ⁵ . If this is the practice then it should be the rule or a defined matter of discretion.
52267	Horticulture New Zealand	V1pLWRP-1545	11.4.13	Oppose	Amend Policy 11.4.13 as follows: From 1 January 2017, further reduce discharges of nitrogen,	The GMPNPLR are yet to be developed so that effects of this policy cannot be determined. Given the uncertainty a tool that is currently in

⁵ 11.108 Variation 1 pLWRP – Section 42A Report

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
					phosphorus, sediment and microbial contaminants from farming activities in the catchment by requiring farming activities to: (a) Implement a Farm Environment Plan prepared in accordance with Schedule 7 Part A, where a property is greater than 50 hectares; and (b) Where a property's nitrogen loss calculation is greater than 15 kg of nitrogen per hectare per annum, meet the Good Management Practice Nitrogen and Phosphorus Loss Rates for the property's baseline land use require farming activities where a property is greater than 50 hectares to implement a Farm Environment Plan, prepared in accordance with Schedule 7 Part A.	development should not be implemented in a regulatory manner without an understanding the implications of the method.
52267	Horticulture New Zealand	V1pLWRP-1546	11.4.13	Oppose	No specific decision requested. Submitter seeks over-allocation be addressed over a long timeframe.	Refer discussion above.
52267	Horticulture New Zealand	V1pLWRP-1547	11.4.14	Oppose	No specific decision requested. Submitter seeks over-allocation be addressed over a long timeframe.	Refer discussion above.
52267	Horticulture New Zealand	V1pLWRP-1548	11.4.15	Oppose	No specific decision requested. Submitter seeks over-allocation be addressed over a long timeframe (timeframe not specified).	Refer discussion above.
52267	Horticulture New Zealand	V1pLWRP-1549	11.4.16	Oppose	No specific decision requested. Submitter seeks over-allocation be addressed over a long timeframe (timeframe not specified.)	Refer discussion above.
52267	Horticulture New Zealand	V1pLWRP-1550	Table 11(i): Catchment Target and Limits for Nitrogen Losses from Farming Activities, Community Sewerage Systems and Industrial or Trade Processes	Oppose	No specific decision requested. Submitter seeks over allocation be addressed over a long timeframe (timeframe not specified).	Reconsideration of Table informed by scientific review and noting provisions exempting community sewage / non farming activities from being required to meet the discharge reductions required.
52267	Horticulture New Zealand	V1pLWRP-1551	11.4.15	Oppose	Amend Policy 11.4.15 as follows: 11.4.15 In circumstances where the reductions required in Policy 11.4.14(b) are unable to be achieved by 2022, any extension of time to achieve the reductions will be considered having regard to: Where a property or farming enterprise cannot achieve the nitrogen baseline an extension of time to achieve the nitrogen baseline will be considered having regard to: a) The implications on achieving the catchment nitrogen load target in Table 11(i) by 2037; and b) The nature of any proposed steps to achieve the reduction; c) The nature of the operation and the accuracy of the nitrogen baseline figure for the operation or property. d) The nature of the operation and limitations in achieving the nitrogen baseline. e) Change of land use from the 'baseline land use'.	Notwithstanding the submitters position on deleting Policy 11.4.14 it is desirable that criteria be established where nitrogen limits or targets may not be met. In respect of horticulture it is important to recognize that the rotational cycle will lead to variations that need to be accounted for.

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
					f) The costs association with achieving the nitrogen baseline. and (c) The sequencing, measurability and enforceability of any steps proposed.	
52267	Horticulture New Zealand	V1pLWRP-1552	Table 11(c): Selwyn Waihora Minimum Flows and Partial Restriction Regime for A Permits	Oppose	No specific decision requested. Submitter seeks review of methodology and amendments (not specified).	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1553	Table 11(d) Selwyn Waihora Minimum Flows for B Permits	Oppose	No specific decision requested. Submitter seeks review of methodology and amendments (not specified).	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1554	Table 11(e): Combined Surface Water and Groundwater Allocation Limits for Selwyn-Waimakariri, Rakaia-Selwyn, and Little Rakaia Combined Surface and Groundwater Allocation Zones	Oppose	No specific decision requested. Submitter seeks review of methodology and amendments (not specified).	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1555	Table 11(f): Kaituna Groundwater Allocation Zone Limits	Oppose	No specific decision requested. Submitter seeks review of methodology and amendments (not specified).	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1556	Table 11(g): Surface Water Allocation Limits	Oppose	No specific decision requested. Submitter seeks review of methodology and amendments (not specified).	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1557	11.5.32	Oppose	Retain 11.5.32(6) including 9 out of 10 year reliability in method 1	Retain 9 year out of 10 reliability.
52267	Horticulture New Zealand	V1pLWRP-1558	Table 11(a): Freshwater Outcomes for Selwyn Waihora Catchment Rivers	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1559	Table 11(b): Freshwater Outcomes for Selwyn Waihora Catchment Lakes	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1560	Table 11(c): Selwyn Waihora Minimum Flows and Partial Restriction Regime for A Permits	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture	V1pLWRP-1561	Table 11(d) Selwyn	Oppose	No specific decision requested. Submitter seeks reconsideration of	Reconsideration of Table informed by

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
	New Zealand		Waihora Minimum Flows for B Permits		Table informed by scientific review and the proposed national objectives framework.	scientific review.
52267	Horticulture New Zealand	V1pLWRP-1562	Table 11(e): Combined Surface Water and Groundwater Allocation Limits for Selwyn-Waimakariri, Rakaia-Selwyn, and Little Rakaia Combined Surface and Groundwater Allocation Zones	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1563	Table 11(f): Kaituna Groundwater Allocation Zone Limits	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1564	Table 11(g): Surface Water Allocation Limits	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1565	Table 11(h): Groundwater Level Restrictions in the West Melton Special Zone	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1566	Table 11(i): Catchment Target and Limits for Nitrogen Losses from Farming Activities, Community Sewerage Systems and Industrial or Trade Processes	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1567	Table 11(j): Irrigation Scheme Nitrogen and Phosphorus Limits	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1568	Table 11(k): Limits for Rivers	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1569	Table 11(l): Limits for Lakes	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1570	Table 11(m): Limits for Groundwater	Oppose	No specific decision requested. Submitter seeks reconsideration of Table informed by scientific review and the proposed national objectives framework.	Reconsideration of Table informed by scientific review.
52267	Horticulture New Zealand	V1pLWRP-1571	Table 11(i): Catchment Target and Limits for	Oppose	No specific decision requested. Submitter seeks equal allocation across the catchment reflecting a differing ratio (a 2:1 ratio) across 2	Refer discussion above.

APPENDIX TO VANCE HODGSON EVIDENCE

Sub ID	Submitter Name	Point ID	Plan Provision	Support/ Oppose	Summary of Decision Requested	Comment
			Nitrogen Losses from Farming Activities, Community Sewerage Systems and Industrial or Trade Processes		slope classes (>15degrees, less than 15 degrees).	
52267	Horticulture New Zealand	V1pLWRP-1572	Table 11(j): Irrigation Scheme Nitrogen and Phosphorus Limits	Oppose	No specific decision requested. Submitter seeks equal allocation across the catchment reflecting a differing ratio (a 2:1 ratio) across 2 slope classes (>15degrees, less than 15 degrees).	Refer discussion above.
52267	Horticulture New Zealand	V1pLWRP-1531	Schedule 10 - Reasonable Use Test	Oppose	Delete changes to schedule 10 or Replace "eight and a half years" with nine years.	Retain 9 year out of 10 reliability.
52267	Horticulture New Zealand	V1pLWRP-1532	11.5.32	Oppose	Amend to include a matter of discretion that considers the rotational nature of the operation.	Amend to include a matter of discretion that considers the rotational nature of the operation
52267	Horticulture New Zealand	V1pLWRP-1533	11.1a	Oppose	Amend to include a definition of 'Irrigation Scheme' as follows: "A collective of farming enterprises collaborating to make use of a common water resource."	Define an irrigation scheme as a group of users managing land within a cap set for nutrients or water use within a connected consent framework, leave Rules 11.5.14 and 11.5.15 unchanged and include a new non-complying activity for irrigation schemes not listed in Table 11(j). This would allow an application to be made to share a load between a group of users (water or nutrients) and for that load to be determined not by the baseline approach but a consideration of other factors (including nitrogen transfers, alternative allocation options).