

**BEFORE INDEPENDENT HEARING COMMISSIONERS APPOINTED BY THE
CANTERBURY REGIONAL COUNCIL**

IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF Submissions and further submissions by Rangitata South Irrigation Limited, Barrhill-Chertsey Irrigation Limited, Acton Farmers Irrigation Co-Operative Limited, Greenstreet Irrigation Society, and Ashburton River Irrigators Association on Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan

SUMMARY OF EVIDENCE OF EVA MAY HARRIS

26 NOVEMBER 2020

STATEMENT OF EVIDENCE OF EVA HARRIS

Introduction

- 1 My name is Eva May Harris. I am the Environmental Manager at Irrigo Centre Limited (**Irrigo**), which is responsible for the environmental management of Rangitata South Irrigation Limited (**RSIL**), Barrhill Chertsey Irrigation Limited (**BCIL**), Acton Farmer Irrigator Co-Operative (**AFIC**), Greenstreet Irrigation Society (**GIS**) and Ashburton River Irrigators Association (**ARIA**). For the purpose of this evidence, I refer to the group of irrigators I represent as “*Irrigo Irrigators*”.
- 2 I hold an MSc in Applied Science, a PGCert (Resource Studies) and a PGDipSci (Chemistry) from Lincoln and Canterbury Universities. In 2017 I completed the Kellogg Rural Leadership Programme, with a research focus on the development of systems which support positive behaviour change within the agriculture centre.¹ For the past 15 years I have been working in resource management, with a focus on auditing and implementation.
- 3 I have worked at Irrigo for over five years as the company’s Environmental Manager developing and implementing the Audited Self-Management programmes for the six member irrigation schemes. This work includes the development and implementation of Environmental Management Systems, Farm Environment Plans (**FEPs**) and audit programme. My role has also covered consent management, catchment group facilitation and stakeholder relations.
- 4 Prior to my work at Irrigo, I held positions in compliance at ECan, Northland and Hawke’s Bay Regional Councils as well as supported Silver Fern Farms with developing their plant environmental management systems and resource consenting requirements throughout the North Island. In my role with Silver Fern Farms, I was also trained in the internationally recognised ISO9000 and ISO14000 systems development and auditing standards.
- 5 My evidence relates to Part A of Plan Change 7 (**PC7**) to the Canterbury Land and Water Regional Plan (**LWRP**) and its effect on Irrigo member shareholders. Specifically, the definitions, policies and rules relating to Commercial Vegetable Growing Operations.
- 6 I am authorised to give this evidence on behalf of RSIL, BCIL, AFIC, GIS and ARIA.

Support of other submissions

- 7 I have submitted evidence separately on behalf of RSIL on matters specifically related to Part B of the Land and Water Regional Plan (Chapter 13, OTOP).

¹ Project Title: *Strategies for the Implementation of Sustainable Change Programmes.*

- 8 The Irrigo Irrigators have worked closely with HortNZ to provide case studies and technical support in their evidence. We wholly support the evidence they have provided on commercial vegetable growing operations.
- 9 The Irrigo Irrigators also support all evidence provided by Federated Farmers in relation to our submission points on matters relating to protection of waterways.
- 10 We support Hekeao Hinds Water Enhancement Trust on any evidence provided in relation to Managed Aquifer Recharge.

Summary of Proposed Relief

- 11 In addition to the proposed relief sought by other submitters detailed above, we would like to re-iterate the following relief sought by The Irrigo Irrigators as potential alternatives for the Hearings panel to consider, detailed in the table below.

(1) The specific provisions of PC7 that The Irrigo Irrigators' submission relates to are:		(2) The Irrigo Irrigators' submission is that:		(3) The Irrigo Irrigators' seeks the following decisions from Environment Canterbury (ECan) (Note: amendments sought to the text of PC7 are shown in tracked changes, with additions shown in <u>underline</u> and deletions shown in strikethrough).
Section & Page Number	Sub-section/ Point	Oppose/ support (in part or full)	Reasons	
Section Policies	4			
Page 17	Policy 4.36A	Support in part	<p>The Irrigo Irrigators support recognition of the constraints applicable to commercial vegetable growing operations and the requirement for all growers to operate at Good Management Practice, complete Farm Environment Plans and to meet applicable nutrient loss reduction targets.</p> <p>However, The Irrigo Irrigators oppose the limitations on growing areas or management to baseline nitrogen loss rates on new commercial vegetable growing land. These constraints implement barriers for growth to keep up with demand, particularly in the domestic market, and is inconsistent with the purpose of the proposed National Policy Statement for Highly Productive Land (NPS-HPL), which aims to:</p> <ul style="list-style-type: none"> Recognise the full range of values and benefits associated with the use of Highly Productive Land for primary production. Maintain its availability for primary production for future generations; and Protect it from inappropriate subdivision, use, and development. <p>The requirement for expanded commercial vegetable growing operations to demonstrate compliance with a nitrogen baseline on the property is onerous in lease situations and will create a barrier for growth. Therefore, Policy 4.36A essentially prevents the full utilisation and conversion of rural, highly productive land to a commercial vegetable growing operation.</p> <p>Furthermore, only a small number of vegetable crops present a potential risk to the environment, which can be managed through robust guidance on Good Management Practice and its effective implementation.</p> <p><i>UPDATED COMMENT: Evidence provided by Nicholas Conland and Iain Kirkwood from PotatoesNZ indicate significantly less impact from potato crops than modelled by Overseer, further supporting the relief sought by The Irrigo Irrigators.</i></p>	<p>Amend Policy 4.36A as follows:</p> <p>Recognise the constraints that apply to commercial vegetable growing operations (including the need to rotate crops to avoid soil-borne diseases and for growing locations near processing facilities) and provide a nutrient management framework that appropriately responds to and accommodates these constraints while improving or maintaining water quality by:</p> <ol style="list-style-type: none"> requiring commercial vegetable growing operations to operate at good management practice; avoiding the establishment of a new commercial vegetable growing operation, or any expansion of an existing commercial vegetable growing operation beyond the baseline commercial vegetable growing area, unless the nitrogen losses from the operation can be accommodated within the lawful nitrogen loss rate applicable to the new location; requiring commercial vegetable growing operations to demonstrate, at the time of application for resource consent and at the time of any Farm Environment Plan audit, how any relevant nutrient loss reduction set out in Sections 6 to 15 of this Plan will be achieved; constraining, as far as practicable, commercial vegetable growing operations to a single nutrient allocation zone or sub-region; and requiring a Farm Environment Plan as part of any application for resource consent and requiring that Farm Environment Plan to be prepared in accordance with Schedule 7 of this Plan.
Section 5 Region Wide Rules				
page 30	Rules 5.42CA – 5.42CD	Support in Part	The Irrigo Irrigators support the principle of providing specific provisions for managing effects from commercial vegetable growing operations.	Amend as described in the sections below.
page 30	Rules 5.42CA – 5.42CD	Oppose	The Irrigo Irrigators oppose the exclusion of an intermediate permitted activity rules. There is little evidence to suggest adverse effects from nitrogen losses on small commercial vegetable growing activities are any worse than other, currently permitted,	Include a two new permitted activity rules 5.42 CAA and 5.42 CAAA which states:

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			<p>small-scale land uses (such as winter grazing) and therefore applying similar nutrient management rules is equitable with the restrictions faced by other land uses in the region. Overseer can also produce erroneous results where there are very small blocks (less than 1 ha), which would be common in small-scale vegetable growing operations.</p> <p>However, The Irrigo Irrigators recognise short rotations, regular cultivation and more regular periods in fallow may mean higher risks of sediment and phosphorus run-off into surface water, if present.</p> <p>The Irrigo Irrigators therefore propose an additional two permitted activity rules for small commercial vegetable growing operations, which recognises the higher risks associated with having natural waterways on the land. The first recognises the low impact of commercial vegetable growing activities where there are no surface water bodies.</p> <p>The second proposed rules clearly set out environmental expectations for small operators through implementation of FEPs and restrictions on other activities which may form part of the commercial vegetable operation, without the additional compliance burden related to obtaining and complying with a resource consent.</p> <p><i>UPDATED COMMENT: HortNZ and PotatoesNZ have provided further evidence to demonstrate the effects from CVP activities are no greater than other farming land use activities, therefore reasonable to provide a permitted activity pathway for small-moderate scale CVP operations in line with that allowed for other farming land use activities.</i></p>	<p><u>5.42 CAA The discharge of nutrients from a commercial vegetable growing operation on a property greater than 4 ha and less than 10 ha and has no natural waterways, springs or wetlands is a permitted activity.</u></p> <p><u>5.42CAAA The discharge of nutrients from a commercial vegetable growing operation which does not meet rule 5.42CAA a permitted activity provided the following conditions are met:</u></p> <ol style="list-style-type: none"> 1. <u>The commercial vegetable growing operation is registered in the Farm Portal by 1 July 2020 and information about the farming activity is reviewed and updated by the commercial vegetable growing operator or their agent every 36 months thereafter, or whenever a material change in the land use associated with the commercial vegetable growing activity occurs.</u> 2. <u>The area of the commercial vegetable growing operation authorised to be irrigated with water is less than 50 hectares; and</u> 3. <u>The area of the commercial vegetable growing operation used for winter grazing is less than:</u> <ol style="list-style-type: none"> a. <u>10 hectares, for a commercial vegetable growing operation less than 100 hectares in area; or</u> b. <u>10% of the area of the commercial vegetable growing operation between 100 hectares and 1000 hectares in area; or</u> c. <u>100 hectares, for any commercial vegetable growing operation greater than 1000 hectares in area; and</u> <p><u>A Management Plan has been prepared in accordance with Schedule 7A and is implemented within 12 months of the rule being made operative and supplied to the Canterbury Regional Council on request.</u></p>
page 30	Rule 5.42CB	Support in part	<p>The Irrigo Irrigators support the inclusion of a discretionary activity rule for commercial vegetable growing activities which are of sufficient risk to ensure good management practice is implemented. However, The Irrigo Irrigators oppose restrictions on the growth area and obligation for the grower to ensure additional land meets nitrogen baseline losses for the property, particularly limiting rotations to within Nutrient Allocation Zones.</p> <p>The s32 report states the challenges faced by growers with meeting existing nutrient management rules, including;</p>	<p>Amend Rule 5.42CB to state:</p> <p>5.42 CB The discharge of nutrients from a commercial vegetable growing operation that does not meet Rule 5.42CA is a restricted discretionary activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. A Farm Environment Plan has been prepared for the activity in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and

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			<ul style="list-style-type: none"> - Complicated rotations which are difficult and expensive to model in Overseer - Management of N losses on leased land <p>These challenges increase significantly if growers become responsible for ensuring N losses on new lease land also complies with property baseline. Furthermore, the primary tool for managing nitrogen losses on a property, Overseer, has limited data supporting the calculated N losses for many vegetable crops, with several crops modelled using proxies. Our growers can provide long-term deep N test results which demonstrate the N losses calculated in Overseer significantly overstate the N losses expected when Good Management Practice is implemented.</p> <p>The s32 report also notes vegetable growing operations contribute between 3-5% of nitrogen losses to the catchment, therefore the additional costs and time related to managing nutrient losses using Overseer is out of proportion to the risks to the environment from these activities. Secondly, commercial vegetable growing activities are naturally limited by availability of appropriate soils, climate, crop rotations and proximity to processing plants and main centres. For these reasons enabling lease arrangements to continue ensure localised effects are minimised and optimum yields, maximising the utilisation of inputs, are obtained.</p> <p>The Irrigo Irrigators therefore recommend a rules framework which ensures commercial vegetable growers are subject to implementation of Good Management Practice, which is sufficient to manage adverse effects from these activities.</p> <p><i>UPDATED COMMENT: See Grower evidence provided by HortNZ on the costs and complexities of managing a large crop rotation across different consents and nutrient allocation zones. Effects are managed through implementation of GMP and risk of nitrogen losses are considerably less than originally modelled by Overseer (see Conland, PotatoesNZ evidence)</i></p>	<p>2. The aggregated area of land used for the commercial vegetable growing operation is no greater than the baseline commercial vegetable growing area; and</p> <p>3. All land that forms part of the commercial vegetable growing operation is located within the same sub-region and Nutrient Allocation Zone.</p> <p>The exercise of discretion is restricted to the following matters:</p> <ol style="list-style-type: none"> 1. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and 2. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and 3. The commencement date for the first audit of the Farm Environment Plan and methods to address any non-compliance identified because of a Farm Environment Plan audit, including the timing of any subsequent audits; and 4. Methods that demonstrate how any nutrient loss reductions required by Sections 6 to 15 of the Plan will be achieved; and 5. Reporting of progress made towards any nutrient loss reductions required by Sections 6 to 15 of the Plan, and any actions implemented to remedy issues identified in any audit of the Farm Environment Plan; and 6. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan if the region-wide rules continue to apply in the sub-region.
page 30	Rule 5.42CC	Oppose	<p>The Irrigo Irrigators oppose limitations on the area of a commercial vegetable operation, and it would be impossible to apply for resource consent as the land subject to the application may not have been leased at that point in time. These challenges are directly contrary to the intention of the NPS-HPL, which looks to prioritise the use of elite soils for the purpose of growing food.</p> <p>The Irrigo Irrigators propose growth in vegetable growing operations is promoted, provided they are managed to Good Management Practice.</p>	Remove Rule 5.42CC

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page 30	Rule 5.42CD	Oppose	The Irrigo Irrigators oppose a prohibited activity rule based on a tool (Overseer) which requires extensive use of proxy crops, produces erroneous results when small blocks are modelled and is not an accurate representation of N loss for many crops.	Remove Rule 5.42CD.
Schedules				
page 186 – 194	Schedule 7	Support in Part	<p>The Irrigo Irrigators support the update of Schedule 7 to recognise the different rules framework proposed for commercial vegetable growing operations. However, these changes fail to adequately address the technical challenges of lease land or where no nitrogen baseline is available or required.</p> <p>The Irrigo Irrigators propose Schedule 7 property identification and nitrogen baseline requirements are updated to take into consideration short-term leases and the size of the operation.</p> <p>Furthermore, the current requirements for Schedule 7 does not take into consideration any situation where multiple properties form part of an integrated farming enterprise, such as a dairy and support block or other arable operation.</p>	Amend Schedule 7 Default Content to give relief to other submissions sought, bespoke requirements for identifying and managing risks on temporary lease blocks.
page 195-196	Schedule 7a	Support in Part	The Irrigo Irrigators supports the inclusion of a new permitted activity rule requiring minor commercial vegetable growing operations to minimise their impact through implementation of Good Management Practice and a simplified Farm Environment Plan.	Amend Schedule 7a to give relief include minor commercial vegetable growing operations, include a section which addresses actions required to minimise potential direct discharges of sediments and other contaminants to water.



Eva Harris
26 November 2020