BEFORE INDEPENDENT HEARING COMMISSIONERS APPOINTED BY THE CANTERBURY REGIONAL COUNCIL

UNDER The Resource Management Act 1991

AND The Environment Canterbury (Transitional

Governance Arrangements) Act 2016

IN THE MATTER OF Submissions and further submissions on Proposed

Plan Change 7 to the Canterbury Land and Water

Regional Plan

LEGAL SUBMISSIONS ON BEHALF OF RANGITATA SOUTH **IRRIGATION LIMITED (SUBMITTER ID PC7-235)**

26 November 2020

Tavendale and Partners

Lawyers, Christchurch Level 3, Tavendale and Partners Centre, 329 Durham Street North P O Box 442 Christchurch 8140

Telephone: (03) 374-9999, Facsimile (03) 374-6888

Solicitor acting: J R King

MAY IT PLEASE THE COMMISSIONERS:

These submissions are presented on behalf of Rangitata South Irrigation Limited (**RSIL**) in relation to proposed Plan Change 7 (**PC7**) to the Canterbury Land and Water Regional Plan (**LWRP**).

Introduction

- RSIL is a farmer-shareholder company which owns and operates the Rangitata South Irrigation Scheme (**Scheme**) which harvests flood flows from the Rangitata River into seven large storage ponds. Drawing from the Scheme's race network are 42 farmer shareholders, who farm properties between the Rangitata and Orari rivers. *Ms Harris'* evidence provides an overview of the Scheme and its shareholder operations.
- Compared to some irrigation schemes in Canterbury, the RSIL Scheme is relatively in its infancy. Though originally touted and gaining traction in the late 1990s¹, the Scheme's development was waylaid for various reasons, including the Water Conservation Order² and then later construction delays.
- 4 Mr Turley's evidence steps through the key dates of the Scheme's development, including the early financial contributions by some shareholders and then the absolute commitment of shareholders to Water User Agreements (WUAs) in late 2010.
- 5 The crucial junctures for the Panel to bear in mind are³:

January 2009 – ECan grants resource consents to construct ponds and to take and store water for irrigation of the Scheme command area

September 2010 – Shareholders enter into WUAs and therefore commit to participating in the Scheme upon its completion

August 2012 – ECan publicly notifies the LWRP, which introduces the Nitrogen Baseline, calculated from land use during 2009-2013

2014/2015 Irrigation season – Water is delivered to all Scheme Shareholders

¹ Evidence of Murray Turley at paragraphs 16-19.

² Water Conservation (Rangitata River) Order 2006.

³ Evidence of Murray Turley, Appendix 1.

November 2018 – RSIL purchases the Scheme from the Scheme Builder

Evidence called for RSIL

- RSIL is largely supportive of the intent of PC7, in that it acknowledges that water quality (and other environmental) outcomes and the activities which impact upon same do need to be closely monitored and appropriately managed (and in many instances, improved).
- RSIL is principally concerned with both the ongoing viability of its farmershareholders' operations and how the activities of its shareholders within the command area may impact upon water quality outcomes in the area.
- 8 For the purposes of this hearing, RSIL has focused the detail of its evidence on the following two requests for relief:
 - 8.1 Altering the application of the Nitrogen Baseline to RSIL shareholders who had converted or expanded their land use towards the end or after the baseline period (ie. at the time or after Scheme water became available), and whose conversions or expansions fall outside of the existing nitrogen baseline exemption. In its submission RSIL proposed alternative methods to achieve this:
 - (a) amending the definition of Nitrogen Baseline as it applies in the OTOP sub-region to enable RSIL shareholders' nitrogen baselines to be calculated as if their land use enabled by Scheme water was operational;⁴ and/or
 - (b) amending Policy 14.4.20.a and Rules 14.4.19 and 14.5.20 to enable shareholders whose conversions or expansions fall outside of the existing nitrogen baseline exemption, to exceed their property's Baseline GMP Loss Rate, but not the property's Good Management Practice Loss Rate as calculated from 2016-2020.5
 - 8.2 Extend Policy 4.100 to provide that entities that hold existing water permits to take and use of water for irrigation, be permitted to use

⁴ RSIL Submission Point PC7-235.21 (at pages 11-12 of RSIL's Original Submission).

⁵ RSIL Submission Point PC7-235.24 (at pages 12-13 of RSIL's Original Submission).

a portion of their existing take for managed aquifer recharge (MAR).6

- 9 In support of its case RSIL has provided evidence from:
 - 9.1 *Murray Turley*, Director of RSIL having had a long involvement in the history of the Scheme and its journey from inception to reality;
 - 9.2 Eva Harris, Environmental Manager at Irrigo Centre Limited. Ms
 Harris provides an overview of the Scheme and the difficulties
 faced by some shareholders with regards to the Nitrogen Baseline,
 and her experience of MAR effects within the command area;
 - 9.3 Julian Weir, Senior Engineer, Hydrogeologist and Groundwater Modeller at Aqualinc Research Limited, providing an analysis of the potential for benefits from MAR in the Scheme's command area:
 - 9.4 Megan Grant, a shareholder in RSIL who has two farming blocks that are adversely affected by the existing definition of the Nitrogen Baseline;
 - 9.5 Dr Glen Treweek, Soil Scientist and Director of Ground Sense Limited, who has modelled the 2019 land use of RSIL's shareholders and compared the likely nitrogen losses to those modelled by ECan;
 - 9.6 Mark Everest, Farm Consultant at Macfarlane Rural Business Limited, analysing the economic implications should RSIL's requested relief in respect of the Nitrogen Baseline not be granted; and
 - 9.7 Sue Ruston, Planner and Director of PPM Consulting Limited, evaluating the Nitrogen Baseline relief sought against the applicable planning framework.
- 10 Unfortunately *Ms Grant* is unable to physically or digitally attend RSIL's presentation. To assist the Panel, *Mr Everest* will be available to answer questions relating to Ms Grant's evidence he has been her family's farm

⁶ At pages 7-8 of RSIL's Original Submission.

advisor⁷ for approximately 10 years and has intimate knowledge of their farming operations, and the financial and nutrient situation for those properties.

Other relief being pursued

- 11 RSIL's original submission sought numerous items of relief. For efficiency it does not produce evidence or argument on all relief sought; for the majority of items it is satisfied that other submitters have. In particular, RSIL supports the case presented by:
 - 11.1 Horticulture NZ⁸ with respect to the notified suite of policies and rules proposed for Commercial Vegetable Growers;
 - 11.2 Hekeao Hinds Water Enhancement Trust⁹ in respect of MAR; and
 - 11.3 Federated Farmers¹⁰ in respect of consent durations in the OTOP sub-region.
- Shareholders in RSIL have also provided their own submissions on PC7 and evidence to the Panel. RSIL strongly supports their involvement in PC7 and does not intend for the select issues presented in its evidence and submissions to detract from the positions taken by individual shareholders.

Altering the Nitrogen Baseline definition as it applies to RSIL shareholders

- As set out in the **Appendix** of these submissions, RSIL seeks the Nitrogen Baseline definition (as it applies in the OTOP sub-region) be amended to incorporate an 'exemption' for farms that held RSIL shares¹¹ prior to the end of the nitrogen baseline period. This proposed 'RSIL exemption' is drafted similar to the existing exemption for dairy conversions.
- 14 RSIL's relief is not seeking to allow its shareholders to avoid GMP or intensify further than they already have done to date.¹² What is being

⁷ Evidence of Mark Everest, at paragraph 12.

⁸ Submitter ID 356.

⁹ Submitter ID 345.

¹⁰ Submitter ID 430.

¹¹ And continue to hold shares.

¹² Evidence of Eva Harris, at paragraph 40.

sought is the ability to hold the 15 affected properties to GMP requirements (or beyond as the case may be), relative to their 'operational baseline' that was enabled by the arrival of Scheme water to their property.¹³

RSIL's submission identified that the existing nitrogen baseline definition did not specifically allow for land use changes that occurred after Scheme water became available, and requested its shareholders be able to be treated in a similar way to the existing dairy conversions exemption.¹⁴

Despite this, the s42A Officers considered RSIL's relief was provided for elsewhere in the LWRP and that an additional definition was not required for this scenario.¹⁵ *Ms Ruston* disagrees that the requested relief is provided for elsewhere in the LWRP.¹⁶

17 While it is unfortunate to have only this brief comment from the s42A Officers, it is submitted that RSIL's evidence and the OTOP ZIPA do show a need for relief in this scenario:

- 17.1 Of the 35 shareholders who intensified their land use near the end of or after the nitrogen baseline period (ie after Scheme water became available), 15 farms do not qualify under the existing dairy farm exemption to the nitrogen baseline definition. 17 As a result, three of those properties fall under the prohibited activity rule in the LWRP 18 and the remaining 12 properties may struggle to comply with their Baseline GMP Loss Rates 19 (that is before any HNCA reductions beyond same are applied).
- 17.2 The taking, storage and use of flood flows from the Rangitata River for irrigation purposes were consented in 2009. The consent decision expressly contemplates the addition of approximately 7,000 hectares of new irrigation to the area.²⁰ RSIL shareholders then committed to taking and paying for Scheme water upon

¹³ Evidence of Eva Harris, at paragraphs 32-35; Evidence of Dr Treweek at paragraph 56.

¹⁴ RSIL Submission Point PC7-235.21 (at pages 11-12 of RSIL's Original Submission).

¹⁵ Section 42A Officer's Report, at page 347.

¹⁶ Evidence of Susan Ruston at paragraphs 45-46.

¹⁷ Evidence of Eva Harris at paragraph 32; Evidence of Dr Glen Treweek at paragraph 55.

¹⁸ Rule 5.42C of the LWRP.

¹⁹ Evidence of Eva Harris, at paragraphs 37-39.

²⁰ Decision of the Independent Commissioners dated 28 January 2009, at paragraph 14.

signing WUAs in 2010²¹, effectively locking in their eventual use of the water for new irrigation (and the consequential intensified land use). Dr Treweek's analysis estimates approximately 5,135 hectares of new irrigation was installed by 2019.²² Counsel submits it would be unjust for those shareholders to be, by consequence of an unfortunate timing of water delivery, unable to undertake their intensified land use.

- 17.3 Two of the ten outcomes that formed the basis of the OTOP ZIPA identified the preservation, improvement and/or increase of irrigation in the area²³ and the ZIPA recommended the taking and use of irrigation scheme water is prioritised over individual surface and groundwater sources.²⁴ Counsel submits legitimising the affected shareholders of RSIL will assist in achieving same, particularly given the LWRP and National Environmental Standards for Freshwater (**NES-F**) operate to 'hold the line' on new irrigation (discussed further at paragraph 17 below).
- 17.4 If RSIL's exemption relief is not granted and some or all of the 15 affected farms revert or partially revert to their previous dryland use and/or pre-expansion operations, they likely face:
 - (a) significant investment sums that cannot be divested on average \$23,082 per hectare for a dairy conversion or expansion, and \$8,175 per hectare for an arable, stock finishing or dairy support development.²⁵ This equates to \$5,255,002 of 'un-divestable' investment for an averaged sized dairy farm, and \$2,348,521 for a 287 hectare arable, finishing or dairy support property;²⁶ and

²¹ Evidence of Murray Turley at paragraph 31 and Appendix.

²² Evidence of Dr Glen Treweek at paragraph 42.

²³ Section 32 Report, at Section 8.3, page 161. The two outcomes referred to are: Outcome 8: Maintain or increase the reliability of water available for industry and irrigation in the zone. Outcome 9: Maintain or increase the area of land irrigated in the zone.

²⁴ OTOP ZIPA, at 4.9.1 Recommendations: General, at iv.

²⁵ Evidence of Mark Everest at paragraph 29 and Table 1.

²⁶ Evidence of Mark Everest at paragraphs 28-29.

(b) where reverting to dryland arable, finishing or dairy support use, a cash farm surplus in the vicinity of -\$1,371 per hectare.27

In addition to Ms Grant's evidence as an affected shareholder and Mr Everest's economic evidence, RSIL submits that should those affected shareholders find themselves in negative equity and/or negative annual cash flow positions, it will also be difficult for them to continue to service their water user charges. With the NES-F now in force²⁸, and the likelihood that any new farm conversion, expansion and/or significant increases in irrigable areas would attract prohibited status under the LWRP, it is submitted there would be limited ability for their shares to be sold or licensed to other properties. Shareholders who are unable to service and on-sell and/or on-licence their shares will likely have a detrimental effect to the ongoing financial viability of the Scheme itself, particularly when the affected shareholders account for up to 5,800 ha of Scheme water.29

Further, the s32 Report, accompanying technical reports and RSIL's 19 evidence, provide comfort that RSIL's requested relief has been (indirectly) tested by ECan and will not unseat PC7 from achieving the desired water quality outcomes:

- 19.1 The s32 Report assessed the proposed stepped reductions of up to 20% beyond GMP by 2035 in the Rangitata-Orton HNCA.30
- 19.2 Dr Treweek's evidence is that the land use modelling undertaken by Mojsilovic (and subsequently relied upon to inform the Rangitata-Orton HNCA reductions³¹), likely overestimates the amount of N-loss that will occur in the RSIL command area upon the implementation of GMP.³² Dr Treweek's Matrix analysis concludes that, when all properties operate at GMP, implementing RSIL's exemption would not lead to an adverse effect on groundwater nitrates beyond what was modelled by ECan as part

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²⁷ Evidence of Mark Everest, at paragraph 35.

²⁸ For example, clauses 16-24 of the NES.

²⁹ Evidence of Eva Harris at paragraph 32.

³⁰ Section 32 Report, at Section 10.3.2, at page 204.

³¹ Rosado, C., "Groundwater technical report to support the Orari-Temuka-Opihi-Pareora limit-setting process" Environment Canterbury Report No. R19/72, at section 2.4, page 6. ³² Evidence of Dr Glen Treweek at paragraphs 14, 51 and 59.

of the Rangitata-Orton HNCA reductions setting process.³³ Dr Treweek's analysis further suggests that implementing RSIL's exemption relief would result in 88 T N/year *less* nitrogen loss than has been modelled by Mojsilovic.³⁴

- 19.3 The Section 32 Report anticipated new data from future monitoring would inform whether greater or lesser reductions were required beyond 2035.³⁵ It therefore remains a possibility that no further reductions beyond those notified in table 14(zc) will be required in the event that RSIL's relief is granted.
- It is submitted the Matrix modelling can be relied upon as an appropriate litmus test of the 'increase' of nitrogen load that would result from RSIL's exemption relief. While there is an inherent level of uncertainty in any modelling exercise, the Matrix method used by Dr Treweek:
 - 20.1 has been approved by ECan as an equivalent to Overseer for setting catchment nitrogen load limits and determining compliance with them (for catchment groups between the Rangitata and Rakaia Rivers);³⁶
 - 20.2 has been demonstrated to calculate nitrogen losses to within 3.6% of aggregated Overseer nutrient budgets.³⁷ Even if accounting for that potential margin of error³⁸, the Matrix estimates the total nitrogen load including RSIL's relief would still be 80.75 T N/yr less than Mojsilovic modelled. By comparison Mojsilovic's report made no formal assessment of errors or parameter uncertainty but acknowledged there was a range of sources of error;³⁹ and
 - 20.3 the Matrix's analysis utilises land use and irrigation data taken from shareholders' 2019 FEPs.⁴⁰ Mojsilovic's analysis was based upon 2016 data⁴¹,

³³ Evidence of Dr Glen Treweek at paragraph 60.

³⁴ Evidence of Dr Glen Treweek at paragraph 57 and Table 3.

³⁵ Section 32 Report, at Section 10.3.2, at page 204.

³⁶ Evidence of Dr Glen Treweek at paragraph 19.

³⁷ Evidence of Dr Glen Treweek at Appendix 10, page 21.

³⁸ At 3.5% margin of error, Dr Treweek's total GMP nitrogen load of 1,350 T N/yr could increase by 47.25 T N/yr to a total of 1,397.25 T N/yr.

³⁹ Mojsilovic, O., "Land use and root zone nitrogen loss modelling – Orari-Teuka-Opihi-Pareora Limit Setting Process", Environment Canterbury Report No. R19/69 (2019), at Section 3, page 15.

⁴⁰ Evidence of Dr Glen Treweek, at paragraph 25.

all of which provide confidence that the Matrix can, as close as ECan could itself model and confirm via Overseer, accurately quantify the current nitrogen load under the status quo.

21 Though ECan's approval of the Matrix is currently limited to the non-OTOP catchment group functions it was originally developed for, it is submitted that in the absence of a resource-intensive, ground-up 2019 Overseer review of all shareholder properties, it is the next most appropriate tool available to RSIL and the Commissioners to estimate the effects of RSIL's exemption.

Legal basis for the relief sought

- 22 Ultimately the task before the Panel is to select one of either implementing RSIL's exemption relief, or the notified PC7 approach (which provides no exemption for RSIL shareholders).
- 23 The Panel must be satisfied that the relief sought by RSIL is appropriate when assessed in accordance with the tasks before it pursuant to section 66 of the RMA and Schedule 1 of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010.

Section 32 RMA

- 24 RSIL is perhaps in the unique position of seeking 'enabling' relief that carries no additional nitrogen load than that which was evaluated by the s32 Report. Taken in combination with the evidence submitted by RSIL, it is submitted the benefits of implementing the RSIL exemption outweigh the costs of doing so.
- 25 As discussed earlier in these submissions, RSIL's evidence (being based upon 2019 FEP data), concludes that implementing RSIL's exemption likely results in 88T less nitrogen per hectare per year than that modelled by the technical reports.⁴² When it calculated the HNCA reductions for Rangitata-Orton from the nitrogen load in the technical reports, ECan has therefore presumed the catchment's nitrogen load is slightly more intensive than it is in reality, even when incorporating RSIL's relief. It

⁴¹ Mojsilovic, O., "Land use and root zone nitrogen loss modelling – Orari-Teuka-Opihi-Pareora Limit Setting *Process*", Environment Canterbury Report No. R19/69 (2019), at page 1 and at Table 2-1. ⁴² Evidence of Dr Glen Treweek at paragraph 57.

follows that including RSIL's relief will not result in a need to increase the notified reductions.

National Policy Statement for Freshwater 2020

- 26 RSIL agrees with counsel for ECan⁴³ that the extent to which it is reasonably practicable for PC7 to give effect to the NPSFM-20 is confined by the scope of submissions on PC7.
- 27 RSIL further agrees with the submissions of counsel for As One Incorporated that the NPSFM-20 must be interpreted in light of the requirements of the RMA (including Part 2 and s32), and therefore (my paraphrasing):⁴⁴
 - 27.1 Freshwater Wellbeing ought only be prioritised over the other wellbeings where there is a situation of making a choice between it and another wellbeing that will or is likely to come at the expense of freshwater outcomes; and
 - 27.2 Te Mana o te Wai does not require the removal of a benefit to Social, Economic and Cultural Wellbeing where such removal cannot be shown to improve outcomes for the Freshwater Wellbeing.
- It is submitted that granting RSIL's exemption relief remains consistent with the NPSFM-20, because it does not require a choosing of one wellbeing over another. On the contrary, RSIL's evidence (discussed earlier in these submissions) is that granting RSIL's relief will not change the trajectory of PC7's Freshwater Wellbeing outcomes.
- In addition, RSIL's evidence shows that the Rangitata-Orton HNCA's trajectory towards water quality outcomes may even be improved further by incorporating dilution benefits from MAR (or increasing the amount of MAR in the catchment)⁴⁵, and so it remains possible that water quality outcomes are met sooner than anticipated by PC7 (even with RSIL's relief being granted).

⁴³ Opening legal submissions on behalf of ECan, at paragraphs 18, 25 and 47.

⁴⁴ Legal Submissions on behalf of As One Inc, at paragraphs 63 and 70.

⁴⁵ Evidence of Dr Glen Treweek, at paragraphs 16, 37-39, 52-53, 61; Evidence of Julian Weir at paragraphs 29 and 34.

This is distinguishable from the situation the Environment Court found itself in when considering the choice between two different methods of determining nitrogen allocation on a per-property basis in Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council.⁴⁶

Here, an environment with RSIL's relief granted results in a lesser (or if anything, a similar) nitrogen load than the existing environment modelled by ECan. It is therefore submitted either decision to grant or refuse RSIL's exemption relief carry the same uncertainties, and the same potential for unforeseen consequences and robustness of mechanisms to manage same, ⁴⁷ as each other. It is submitted this results in no additional detriment to the first and second order priorities of Te Mana o te Wai, as the same water quality outcomes are set to be achieved by the remainder of PC7. The point of difference being that one option brings significant impacts upon the third priority, and therefore that scenario ought to be avoided.

32 Mr Everest's evidence provides an analysis of the economic costs of retaining PC7 as notified with respect to RSIL's exemption relief. His evidence identifies the potential for significant economic effects upon the affected shareholder group should they not be enabled to use their post-Scheme-water operation as their nitrogen baseline. It is submitted these effects are almost certain for the prohibited status properties, and remain significant potential threats to the viability of the remaining 12 affected properties.

National Environmental Standards for Freshwater

Counsel submits the NES-F provides further direction in how this Panel ought to consider and implement the NPSFM-20 in relation to RSIL's requested relief.

The NES-F employs a 2014-2019 reference period to in effect 'hold the line' on certain expansion activities and intensification activities (for example, converting land to dairy farm land⁴⁸, or increasing dairy support land area or irrigable area on a dairy farm by more than 10 hectares⁴⁹).

⁴⁶ Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council [2019] NZEnvC 136.

⁴⁷ at [360].

⁴⁸ Clauses 18-19 and 24s NES-F.

⁴⁹ Clauses 20-24 NES-F.

The NES-F sets that holding pattern until such time as the NPSFM-20 can be given effect to, as soon as reasonably practicable. Compliance with the NES-F which now serves as an additional book-end to the development that took place following Scheme water becoming available.

Opposing submissions and evidence

- RSIL's exemption relief has encountered little in the way of opposition. It is noted:
 - 35.1 One submitter (Te Rūnanga o Arowhenua and Te Rūnanga o Ngāi Tahu⁵⁰) made a further submission in opposition to RSIL's exemption relief and provided the following reason: *uncertain of the overall effects on the Plan if this definition is amended;*⁵¹ and
 - 35.2 No submitter provided rebuttal evidence in opposition to the evidence presented by RSIL on the point.⁵²

Scope

- The **Appendix** to these submissions clarifies that RSIL requests its relief be inserted as a new definition in the Chapter 14 definitions at Section 14.1A.
- Though Section 14.1A was not expressly referred to in RSIL's submission, the submission did seek to "Expand [the] definition of the nitrogen baseline in the OTOP zone" and the requested drafting followed below.⁵³ It is therefore submitted the requisite scope exists to implement RSIL's exemption relief in this way.
- It is submitted the request was fairly and reasonably raised in RSIL's original submission. No person has been denied an opportunity to respond. No rebuttal evidence has been received in opposition to RSIL's exemption, despite parties filing further submissions in opposition to it.

⁵⁰ Submitter ID 424. Counsel notes Te Rūnanga o Ngãi Tahu (Submitter ID 243) did not make a further submission on RSIL's exemption.

⁵¹ Further Submission of Te Rūnanga o Arowhenua and Te Rūnanga o Ngāi Tahu, at page 10.

⁵² Counsel acknowledges that Ms Treena Davidson (on behalf of Nga Runanga of Canterbury) did provide limited rebuttal evidence in general support of the notified reductions in HNCAs – see paragraphs 215-217 of her evidence.

⁵³ RSIL Submission Point PC7-235.21 (at pages 11-12 of RSIL's Original Submission).

Conclusion

Granting RSIL's requested amendment to the definition of the nitrogen baseline would result in three shareholder properties gaining a legitimate consenting pathway under the LWRP, and a further 12 properties standing a better chance of running a viable (though still challenging) business when meeting GMP and beyond. This would legitimise the farming development that had a long lead in time since the Scheme was first consented, and later cemented when shareholders signed WUAs.

Providing for this outcome will not be to the detriment of Freshwater Wellbeing – at worst, the lay of (the N-loss of) the land is less than what was modelled by ECan when determining the Rangitata-Orton HNCA reductions. Put simply, no adjustment is required to the reductions in table 14(zc) in the event RSIL's relief is implemented and therefore the relief will not unseat PC7 from its trajectory towards achieving the desired water quality outcomes.

It is therefore submitted that the relief sought by RSIL to amend the nitrogen baseline definition as it applies to affected shareholders, most appropriately achieves the requirements of the statutory and higher order documents.

Johanna King

Counsel for Rangitata South Irrigation Limited 26 November 2020

Appendix - RSIL's requested relief with respect to the Nitrogen Baseline

Insert new definition in Section 14.1A of Section 14 of the LWRP, as follows:

Words or phrase	Definition
Nitrogen Baseline	a. the discharge of nitrogen below the root zone, as modelled with OVERSEER, (where the data is inputted into the model in accordance with OVERSEER Best Practice Data Input Standards), or an equivalent model approved by the Chief Executive of Environment Canterbury, averaged over a 48 month consecutive period within the period 1 January 2009 to 31 December 2013, and expressed in kg per hectare per annum, except in relation to Rules 5.46, 5.56, 5.58A and 5.62, where it is expressed as a total kg per annum from the identified area of land; and
	b. in the case where a building consent and effluent discharge consent have been granted for a new or upgraded dairy milking shed in the period 01 January 2009 to 31 December 2013, the calculation under (a) will be on the basis that the dairy farming activity is operational; and
	c. in the case where a shareholder of Rangitata South Irrigation Limited was issued shares in Rangitata South Irrigation Limited prior to 31 December 2013 in relation to the property, the calculation under (a) will be on the basis that the farming activity supported by such shares is operational on the property; and
	d. <u>if OVERSEER is updated, the most recent version is to be used to recalculate the nitrogen baseline using the same input data for the same period as used in (a) above."</u>

(red text denotes drafting that varies from the existing Nitrogen Baseline definition in Section 2.9 of the LWRP)