

Tabled at Hearing 06/09/2016.

**IN THE MATTER** of the Resource Management Act 1991

**A N D**

**IN THE MATTER** of submissions and further submissions by Rangitata Diversion Race Management Limited (**RDRML**) on proposed Plan Change 5 to the Canterbury Land & Water Regional Plan (**Plan Change 5**)

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**LEGAL SUBMISSIONS ON BEHALF OF RDRML**

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**Introduction**

1. I appear today on behalf of RDRML.
2. The Commissioners will recall that RDRML is a water supply company abstracting, managing and supplying water for irrigation, generation and community stock water schemes.<sup>1</sup>
3. In relation to the Mayfield-Hinds, Valetta and Ashburton-Lyndhurst irrigation schemes, the Commissioners have heard evidence called by RDRML at previous hearings, and described for this hearing<sup>2</sup> as to its Audited Self-Management Programme which includes the completion of Farm Environment Plans with a view to improving on farm practices. This is entirely consistent with the direction of Plan Change 5 which is stated in the section 32 report as (emphasis added).<sup>3</sup>

Part A - Amendments to the **region-wide provisions** relating to nutrient management. **These amendments improve the nutrient management framework through incorporating good management practice requirements for farming activities,** overcoming plan implementation issues relating to the use of the OVERSEER® model and other more minor

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<sup>1</sup> Its shareholders comprise three irrigation schemes (the Mayfield-Hinds, Valetta and Ashburton-Lyndhurst irrigation schemes), Trustpower Limited, and the Ashburton District Council as owner of the stockwater network.

<sup>2</sup> Statement of Evidence of Reuben Edkins dated 22 July 2016, sections 5.0 and 6.0.

<sup>3</sup> "Section 32 Evaluation Report for Plan Change 5 (Nutrient Management and Waitaki Sub-region) to the Canterbury Land and Water Regional Plan", page 1-1.

amendments such as to provisions relating to Farm Environment Plan auditing; and

4. Furthermore, the s 32 report appears to acknowledge that irrigation schemes can support the implementation of good management practice:<sup>4</sup>

Irrigation schemes with their detailed knowledge of shareholder farms can play a significant role in supporting the implementation of GMP on farms within their scheme command areas.

5. However, RDRML considers that there are further amendments which are required to the policies and rules within Plan Change 5 to better assist principal water suppliers and/or irrigation schemes to continue to support the implementation of good management practice.
6. Further, in terms of implementing Plan Change 5, RDRML is concerned about the apparent disparity between the estimated reduction in nitrogen losses assessed in the section 32 report and the reduction which RDRML has estimated using actual examples. To recap, the section 32 report states:<sup>5</sup>

It is not clear how many farmers in the region are already applying the industry agreed GMP, but an initial study of survey farms used in the MGM project (MGM 2015b) indicates that while some farms are operating at or better than GMP, others are not. If GMP was applied, the mean reduction in nitrogen losses ranged between 9% and 24% and phosphorus between 0% and 16%.

7. The evidence for RDRML is that the reduction in nitrogen loss rates to achieve GMP levels of loss required of properties deemed to be already operating at or about GMP levels of on farm practice, based on a Farm Environment Plan Audit, is 39%.<sup>6</sup>
8. RDRML has no quarrel with the 'narratives' in "Industry-agreed Good Management Practices relating to water quality" dated 18 September 2015. The key issue for RDRML (and indeed, it appears other primary sector

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<sup>4</sup> "Section 32 Evaluation Report for Plan Change 5 (Nutrient Management and Waitaki Sub-region) to the Canterbury Land and Water Regional Plan", page 4-4.

<sup>5</sup> "Section 32 Evaluation Report for Plan Change 5 (Nutrient Management and Waitaki Sub-region) to the Canterbury Land and Water Regional Plan", page 4-6.

<sup>6</sup> Statement of Evidence of Reuben Edkins dated 22 July 2016 , paragraph 10.2 and Appendix Four.

submitters) is whether the Baseline GMP Loss Rates and/or Good Management Practice Loss Rates generated (estimated) by the Farm Portal, are reflective of those narratives. In RDRML's submission, they are not. The relief sought by RDRML substantially flows from that key issue.

### **Context for RDRML's interests in Plan Change 5**

9. The irrigation schemes supplied by RDRML sit within the Ashburton Sub-region (as defined in Section 13 of the Canterbury Land & Water Regional Plan (**LWRP**)).
10. Within the Ashburton Sub-region, the irrigation schemes supplied by RDRML are located in areas which are governed by different water quality rules:
  - (a) The rules for the Lower Hinds/Hekeao Plains Area (**Lower Hinds**) sit within Section 13 of the LWRP. These were the subject of Plan Change 2 to the LWRP. Within the Lower Hinds, RDRML supplies water to both the Mayfield-Hinds and Valetta irrigation schemes.
  - (b) The region wide rules sit within Section 5 of the LWRP. The Ashburton-Lyndhurst irrigation scheme is located in an area of the Ashburton Sub-region which remains subject to the region wide rules of the LWRP.
11. RDRML holds the resource consent which enables the farmers within the irrigation schemes it supplies to use land for farming and discharge nutrients to water arising from the use of land for farming. This is resource consent CRC121664 which was granted on 26 May 2014 and expires on 26 May 2019.<sup>7</sup>
12. RDRML is taking a forward looking view of the changes to the LWRP proposed by Plan Change 5. At this stage, unless a further plan change is proposed by the Canterbury Regional Council for the geographical area encompassing the Ashburton-Lyndhurst irrigation scheme,<sup>8</sup> then when resource consent CRC121664 expires:

<sup>7</sup> Statement of Evidence of Reuben John Edkins dated 22 July 2016, Appendix One.

<sup>8</sup> The published "Canterbury Regional Council Progressive Implementation Programme 2015" schedules the Council's programme for implementing Policies A1, A2, A3, B1, B2, B5, B6, CA1, CA2,

- (a) If an application is made by RDRML to replace resource consent CRC121664, then it will be treated as a discretionary activity for the discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene s15(1) of the Resource Management Act 1991 (**RMA**) under the following rules:
  - (i) Rule 13.5.22 - this rule will require compliance with the reduction regime for nitrogen loss in the Lower Hinds (and therefore the Mayfield-Hinds and Valetta irrigation schemes) which has been determined through Plan Change 2 to the LWRP and which is essentially set out in Policy 13.4.13; and
  - (ii) Rule 5.62 - being the region wide rule which will apply in respect of the Ashburton-Lyndhurst irrigation scheme. This is not subject to Plan Change 5. However Policy 4.41C, which forms part of Plan Change 5, will seek to limit through conditions on any resource consent granted, total nitrogen loss so that it does not exceed the Baseline GMP Loss Rate.
- (b) If discharge permits are granted under those discretionary activity rules, then the use of land for farming will be a permitted activity under the following rules:
  - (i) Rule 13.5.21; and
  - (ii) Rule 5.41A. Rule 5.41A forms part of Plan Change 5 and is supported by RDRML.
- (c) If an application is not made by RDRML (or the individual irrigation schemes) to replace resource consent CRC121664, then the individual farming activities will be governed differently:
  - (i) The use of land for farming is the activity which will be regulated. In the Lower Hinds, the rules in Section 13 of the

LWRP will determine activity status, with the incidental nutrient discharges being treated as a permitted activity under rules 13.5.24 provided the following condition is met:

1. The land use activity associated with the discharge is authorised under Rules 13.5.8 to 13.5.11 and 13.5.13 to 13.5.19.

- (ii) Similarly, under the region wide rules, the rules which are the subject of Plan Change 5 (requiring use of the Farm Portal) would determine activity status, with the incidental nutrient discharges being treated as a permitted activity under rule 5.63 provided the following condition is met:

1. The land use activity associated with the discharge is authorised under Rules 5.41 to 5.59; or

13. Against that background, RDRML's interests in Plan Change 5 relate to:

- (a) Policies that would apply to a discretionary activity consent process insofar as these would relate to the geographical area encompassing the Ashburton-Lyndhurst irrigation scheme. Policy 4.11 is of concern as it seeks to limit the duration of resource consents to five years. In contrast, the policy provisions for the Lower Hinds do not contain such a constraint. Indeed it can be argued that the staged reduction approach to nitrogen loss in the Lower Hinds (which extends over a longer period to 2035) suggests that longer term consents are contemplated.
- (b) Policies which apply Baseline GMP Loss Rate as determined through the Farm Portal to a discretionary activity consent process insofar as these would relate to the geographical area encompassing the Ashburton-Lyndhurst irrigation scheme. Policy 4.41C clearly captures principal water suppliers and irrigation schemes. It states:

- (b) discharge permits granted to irrigation schemes or principal water suppliers to be subject to conditions that restrict the total nitrogen loss to a limit not exceeding:

(i) the Baseline GMP Loss Rate for any land within the Red, Lake or Orange Nutrient Allocation Zones; and

(ii) a total of 5kg/ha/yr above the Baseline GMP loss rate for any land within the Green or Light Blue Allocation Zones.

(c) The rule framework that would apply in the event that RDRML (or the individual irrigation schemes) did not replace resource consent CRC121664.

(d) A general concern that the new 'benchmark' for good management practice will not be the narratives in "Industry-agreed Good Management Practices relating to water quality" dated 18 September 2015, but will be the Baseline GMP Loss Rates and/or Good Management Practice Loss Rates generated through the Farm Portal. This prospect presents some uncertainty for RDRML in respect of the Lower Hinds, given the likely reductions necessary to achieve Baseline GMP Loss Rates and/or Good Management Practice Loss Rates, beyond which further substantial reductions are required over time to 2035.

14. RDRML has noted the legal submission for Barrhill Chertsey Irrigation Limited (**BCIL**) that irrigation schemes appear to retain a consenting pathway that is not directly reliant on the Farm Portal.<sup>9</sup> On the face of it this is correct as regards the rule which accords activity status (rule 5.62), because this does not prescribe any conditions which link back to the Farm Portal. However, as discussed, Policy 4.41C, which forms part of Plan Change 5, will seek to limit through conditions on any resource consent granted, total nitrogen loss so that it does not exceed the Baseline GMP Loss Rate. As the Baseline GMP Loss Rate is estimated by the Farm Portal, and Policy 4.41C is directive in its words, from RDRML's perspective the consenting pathway for irrigation schemes is reliant on the Farm Portal as regards to land within the Red, Lake or Orange Nutrient Allocation Zones (which will encompass the Ashburton-Lyndhurst irrigation scheme).

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<sup>9</sup> Summary of submissions on behalf of Barrhill Chertsey Irrigation Limited dated 23 August 2016, paragraph 3.

15. For completeness, I note that the other policies of Plan Change 5 which are relevant to the consenting pathway for irrigation schemes, could be those dealing with "farming activities" – Policies 4.37, 4.38, 4.38AA and 4.38A. These similarly import the Baseline GMP Loss Rate and the Good Management Practice Loss Rate and are therefore reliant on the Farm Portal. It is not entirely clear that these apply to the irrigation schemes (as they, in large part, relate to the use of land for farming) but on the basis that "farming activities" is not defined it would arguably include the discharge of nutrients.

### **Alignment with other primary sector submissions**

16. RDRML has participated in the primary sector group discussions and preparations for the Plan Change 5 hearings.
17. RDRML does not understand any of the primary sector submitters to take any issue with the narratives in "Industry-agreed Good Management Practices relating to water quality" dated 18 September 2015.
18. These narratives are framed much like an objective or policy. For example:<sup>10</sup>

#### **Irrigation and water use**

Our intent: To apply irrigation water efficiently to meet plant demands and minimise risk of leaching and runoff.

**GMP: Manage the amount and timing of irrigation inputs to meet plant demands and minimise risk of leaching and runoff.**

#### *Implementation guidance:*

There is a demonstrable reason why irrigation is to be applied, for example:

- to replace soil moisture deficit
- for the purpose of herbicide activation
- to prepare soil for cultivation
- frost protection
- for fertigation

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<sup>10</sup> "Industry-agreed Good Management Practices relating to water quality" dated 18 September 2015, page 16.

19. The matter at issue is whether the Farm Portal is actually reflective of those narratives or goes well beyond what is reflective of good management practice.
  
20. RDRML has given attention to the cases presented by BCIL, Irrigation New Zealand Incorporated (INZ), Fonterra Co-operative Group Limited, and Combined Canterbury Provinces of Federated Farmers of New Zealand which have already been presented. It does not wish to repeat at length submissions which the Commissioners have already heard. RDRML does, however, share and reiterates the concerns expressed by those submitters with respect to:
  - (a) The inability of the Farm Portal to accurately generate Baseline GMP Loss Rates and Good Management Practice Loss Rates due to:
    - (i) Issues with the 'irrigation proxy' and 'fertiliser proxy' contained in Table s28 of Schedule 28; and
    - (ii) Reliance of the Farm Portal on OVERSEER®.
  - (b) The use of prohibited activity status and the absence of an alternative consent pathway for farming activities which, although operating at good management practice in accordance with the narratives in "Industry-agreed Good Management Practices relating to water quality" dated 18 September 2015, do not meet Baseline GMP Loss Rates or Good Management Practice Loss Rates.
  - (c) The timeframes for meeting Good Management Practice Loss Rates as determined by the Farm Portal, and the absence from the s 32 report of robust discussion on the economic implications of the provisions proposed by Plan Change 5.
  
21. Against that background, RDRML has focused its evidence on:
  - (a) Concerns with the irrigation proxy and fertiliser proxy contained in Table s28 of Schedule 28;



- (b) Examples of loss rates generated by the "GMP Tool" applying the irrigation and fertiliser proxies to actual farming activities which are located within the irrigation schemes supplied by RDRML and which RDRML understands to be operating at (or near) good management practice; and
- (c) Solutions to RDRML's concerns. The solutions suggested by RDRML are:
  - (i) A short adjournment of 3-4 months to enable agreement (between relevant experts) to be sought on an appropriate set of fertiliser and irrigation proxies;
  - (ii) A longer timeframe within the Plan Change 5 provisions for achieving Good Management Practice Loss Rates;
  - (iii) An alternative consent pathway.

22. The witnesses to be called in support of RDRML's submissions are:

- (a) Reuben Edkins, Environmental Compliance Manager for RDRML; and
- (b) David Greaves, Associate and Environmental Planner at Ryder Consulting Limited.

#### **Issues addressed by legal submissions**

23. The Commissioners have pre-read the statements of evidence called by RDRML and I will not repeat the content of those.

24. I address the following issues arising from RDRML's submissions

- (a) Policy 4.11.
- (b) Policy 4.38A.
- (c) The alternative consent pathway.

- (d) National Policy Statement for Freshwater Management 2014 (**NPSFM**) considerations.

**Policy 4.11**

- 25. Policy 4.11 did not initially relate to the duration of resource consents, but has been amended by Plan Change 5 to read:

The setting and attainment of catchment specific water quality and quantity outcomes and limits is enabled through limiting the duration of any resource consent granted under the region-wide rules in this Plan to a period not exceeding five years past the expected notification date (as set out in the Council's Progressive Implementation Programme) of any plan change that will introduce water quality or water quantity provisions into Sections 6 – 15 of this Plan.

- 26. In the RDRML and Ashburton-Lyndhurst irrigation scheme context, this would limit any consent duration to a period of 5-6 years, calculated as follows:

- (a) RDRML's resource consent CRC121664 expires on 26 May 2019;
- (b) The published "Canterbury Regional Council Progressive Implementation Programme 2015" schedules the Council's programme for implementing Policies A1, A2, A3, B1, B2, B5, B6, CA1, CA2, CA3 and CA4 of the National Policy Statement for Freshwater Management in the Ashburton-Rakaia sub-region as Stage 6 - notification (no later than) 2019/20;
- (c) This would 'limit' a consent duration for a replacement consent to either 2024 or 2025 being a maximum period of 5 years past the expected notification date of 2019 or 2020.

- 27. This may unduly limit the duration of a resource consent relating to all irrigation schemes supplied by RDRML. A further possible option is a resource consent of longer duration for the Mayfield-Hinds and Valetta irrigation schemes, and a resource consent of shorter duration for the Ashburton-Lyndhurst irrigation scheme. Neither of these options is attractive

to RDRML as it would prefer to invest in one comprehensive long term resource consent for all three irrigation schemes which it supplies.

28. The section 32 report notified with Plan Change 5 is silent as to the intention of Policy 4.11.
29. On its face, the intention appears to be to ensure that any resource consents granted will have to be replaced so as to 'align' with any plan change that will introduce water quality or water quantity provisions into Sections 6 – 15 of the LWRP.
30. This may be necessary in respect of individual farming activities, where the region wide rules regulate the use of land for farming and make the incidental discharge of nutrients a permitted activity.
31. However, in the principal water supplier/irrigation scheme context, it is the discharge of nutrients which requires resource consent. In the case of discharge permits, it is unnecessary to have a policy limiting the duration of resource consents in this way, because s 128(1)(b) of the RMA would enable a review:

(b) In the case of a coastal, water, or discharge permit, when a regional plan has been made operative which sets rules relating to maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality or air quality, or ranges of temperature or pressure of geothermal water, and in the regional council's opinion it is appropriate to review the conditions of the permit in order to enable the levels, flows, rates, or standards set by the rule to be met; or

32. RDRML's submission sought that Policy 4.11 be deleted. An alternative option, given that a review under s 128(1)(b) of the RMA would not capture a land use consent, would be to limit the application of the policy to land use consents. For example:

The setting and attainment of catchment specific water quality and quantity outcomes and limits is enabled through limiting the duration of any resource land use consent granted under the region-wide rules in this Plan to a period not exceeding five years past the expected notification date (as set out in the Council's Progressive Implementation Programme) of any plan change that

will introduce water quality or water quantity provisions into Sections 6 – 15 of this Plan.

33. It is submitted that this would grant less than the full relief sought by RDRML in its submission (to delete Policy 4.11), and as such it would be within the scope of the RDRML submission on Plan Change 5.

***Policy 4.38A***

34. Although Plan Change 5 makes the use of land for farming within irrigation schemes a permitted activity (rule 5.41A), whilst the rule making the discharge of nutrients is a discretionary activity which is not proposed to be changed by Plan Change 5 (rule 5.62), the policies of Plan Change 5 import the Farm Portal to the consenting pathway for irrigation schemes.
35. In general terms, it appears that the direction of the LWRP including Plan Change 5 is not to differentiate the nutrient management regimes for farming activities, whether they are situated in an irrigation scheme or not.
36. The two factors which, in my submission, are relevant to the extent to which the irrigation schemes should have more tailored provisions are:
  - (a) Irrigation schemes are generally operating under resource consents which authorise intensification subject to conditions and have not yet expired. For example, in the case of RDRML, resource consent CRC121664 authorises "New Irrigation Areas" and does not expire until 26 May 2019.<sup>11</sup> As 'new irrigation' has come on line subsequent to the nitrogen baseline period of 2009-2013 it has exceeded (lawfully) the nitrogen baseline. New irrigation can also continue to be lawfully established between 13 February 2016 and 26 May 2019.
  - (b) The conditions on these resource consents also generally limit nitrogen loss by way of a total number rather than an individual property load. For example, condition 7.a.ii of resource consent CRC121664 provides for:

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<sup>11</sup> Statement of Evidence of Reuben John Edkins dated 22 July 2016, Appendix One.

263 tonnes of N and 6.82 tonnes of P from land within the *New Irrigation Areas* located within Zone 1 as shown on plan CRC121664B.

37. For the "New Irrigation Areas" these are lower total loads (derived differently) than the total loads for existing irrigation areas. As set out in condition 7.b.ii:

For the *New Irrigation Areas* the method used to determine the nutrient limit shall be consistent with the approach used in the report prepared by Macfarlane Rural Business dated 14 December 2013 and entitled "Hinds catchment nutrient and on-farm economic modelling, Final report (version 4), Volume 1 – Main Report."

38. For all irrigation areas (existing and new), compliance is generally determined on an aggregate basis which accommodates what may be termed 'overs and unders' within the irrigation schemes depending on the make-up of farming practices, irrigation systems, and movement towards good management practice on individual farms.
39. Of these two factors, the LWRP provisions accommodate the aggregation issue to an extent. The definition of "nitrogen baseline" for example concludes with the words "expressed in kg per hectare per annum, except in relation to Rules 5.46 and 5.62, where it is expressed as a total kg per annum from the identified area of land."
40. However the LWRP provisions of Plan Change 5 would not accommodate lawful exceedance of the nitrogen baseline. This is because Policy 4.41C(a)(i) seeks to limit the nitrogen loss rate to the Baseline GMP Loss Rate (the definition of which links to the "nitrogen baseline").
41. Policy 4.38A appears to be the mechanism by which this issue is addressed, as it sets out the basis on which resource consents to exceed the nitrogen baseline can be considered (noting that it is not absolutely clear that Policy 4.38A applies to irrigation schemes):

Within the Red, Orange, Green or Light Blue Nutrient Allocation Zones, only consider the granting of an application for resource consent to exceed the nitrogen baseline where:

(a) the nitrogen baseline has been lawfully exceeded prior to 13 February 2016 and the application contains evidence that the exceedance was lawful; and

(b) the nitrogen loss calculation remains below the lesser of the Good Management Practice Loss Rate or the nitrogen loss calculation that occurred in the four years prior to 13 February 2016.

42. The difficulty with Policy 4.38A as currently worded is that limb (b) requires that the nitrogen loss calculation remains below the *lesser* of the Good Management Practice Loss Rate or the nitrogen loss calculation that occurred in the four years prior to 13 February 2016. There are two problems with this:

- (a) For new irrigation which has occurred prior to 13 February 2016, this appears to be unachievable - the evidence for RDRML is that the reduction in nitrogen loss rates to achieve GMP levels of loss required of properties deemed to be already operating at or about GMP levels of on farm practice, based on a Farm Environment Plan Audit, is 39%;<sup>12</sup>
- (b) It will not provide for any new irrigation which has (lawfully) occurred after 13 February 2016.

43. RDRML's submission sought that limb (b) of Policy 4.38A be amended as follows:

the nitrogen loss calculation remains at, or below the ~~lesser of the Good Management Practice Loss Rate or the~~ nitrogen loss calculation that occurred in the four years prior to the 13th of February 2016 but that management practices are improved such that nitrogen losses below the root zone achieve the Good Management Practice Loss Rate over time.

44. In my submission this wording would more appropriately provide for new irrigation which has been undertaken within the irrigation schemes prior to 2016 (and which can generate a nitrogen loss calculation) for the following reasons:

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<sup>12</sup> Statement of Evidence of Reuben Edkins dated 22 July 2016, paragraph 10.2 and Appendix Four.

- (a) The wording ties (as is appropriate) the nitrogen loss calculation to that occurring in the four years prior to February 2016;
  - (b) To the extent that the wording still looks to achieve the Good Management Practice Loss Rate over time there is then a strong policy basis to require that through conditions on any resource consent granted.
45. The relief sought by RDRML would not address new irrigation which has (lawfully) occurred after 13 February 2016. This particular issue has not been directly addressed by RDRML's submissions. I note that other submitters have sought to address it through amendments to Policy 4.41C. For example, BCIL and Central Plains Water Limited both sought in their submissions that Policy 4.41C(b)(i) be amended as follows:
- (i) the nitrogen loss that was authorised by a resource consent that was granted prior to 13 February 2016 (including any renewal of that resource consent after 13 February 2016); or
46. RDRML asks that in making decisions on those submissions by BCIL and Central Plains Water Limited the Commissioners grant the relief to make provision for new irrigation yet to be implemented under existing resource consents. In my submission that is appropriate because:
- (a) Such irrigation is lawfully authorised and is or will be lawfully established at some significant investment;
  - (b) For the reasons traversed in the Variation 1 and Plan Change 2 hearings and decision, it is appropriate to treat such irrigation as part of the existing environment;<sup>13</sup>
  - (c) The consents in question for new irrigation are generally subject to rigorous conditions which stipulate lower nutrient load conditions and require full reporting including through Farm Environment Plans.

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<sup>13</sup> Report and Recommendations of the Hearing Commissioners on proposed Variation 1 to the proposed Canterbury Land and Water Regional Plan adopted by Council as its Decision on 23 April 2015, paragraphs 406-415; Report and Recommendations of the Hearing Commissioners on proposed Plan Change 2 to the Canterbury Land and Water Regional Plan dated 21 December 2015, paragraphs 208-227.

47. I note finally that a consistent theme of legal submissions has been a question as to whether Policies 4.37-4.38E apply to irrigation schemes, or whether irrigation schemes are exclusively addressed under Policies 4.41A-4.41D,<sup>14</sup> and clarification of that issue would assist plan users.

***The alternative consent pathway***

48. In an irrigation scheme context, the relevance of an alternative consent pathway through the rules of Plan Change 5 would be to those individual farming activities within irrigation schemes if, when irrigation scheme resource consents expire, they are not replaced and it falls to the individuals to comply with permitted activity rules or seek resource consent.
49. RDRML's submissions on Plan Change 5 sought provisions for an alternative consent pathway. The relief it sought for the various rules was to add a third limb to the relevant rules to enable the consideration of farm activities that cannot be accurately modelled by the Farm Portal.
50. This relief is reflected in the Annexures to the Statement of Evidence of David Greaves dated 22 July 2016 in similar terms to that relief sought in RDRML's submissions.
51. RDRML has considered further the provisions suggested by other submitters. It has particularly considered the alternative consent pathway proposal proposed in the Statement of Evidence of Gerard Willis dated 22 July 2016 which comes through proposed rule 5.46A.<sup>15</sup> It acknowledges that Mr Willis' proposal has more precise wording and accordingly it supports in preference the relief suggested by Mr Willis.

***National Policy Statement for Freshwater Management 2014 (NPSFM)***

52. The Commissioners will wish to consider the effect of the relief sought by RDRML which seeks to:

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<sup>14</sup> Summary of submissions on behalf of Barrhill Chertsey Limited dated 23 August 2016, paragraph 42; Summary of submissions on behalf of Central Plains Water Limited dated 25 August 2016, paragraph 19; Legal Submissions on behalf of Opuha Water Limited dated 26 August 2016, paragraph 24.

<sup>15</sup> Statement of Evidence of Gerard Willis dated 22 July 2016, pages 48 and 49.



- (a) Enable the replacement of resource consents for 'new irrigation' lawfully carried out pursuant to existing resource consents; and
- (b) An alternative consent pathway.

53. In my submission the Commissioners can be satisfied that the changes sought by RDRML, if granted, would give effect to the NPSFM for the following reasons:

- (a) Objective A2 of the NPSFM seeks that the overall quality of freshwater within a region is maintained or improved.
- (b) Any enhancement or improvement should occur within a specified timeframe. However, there is no prescribed requirement for settling on an appropriate timeframe.<sup>16</sup>
- (c) RDRML does not suggest that there should be provision for further intensification beyond what has been lawfully authorised under existing resource consents. When coupled with the improvements being made to existing irrigation throughout the region through the adoption of GMP and implementation of reductions, the overall quality of freshwater within the region should be maintained or improved.
- (d) Nor does the proposal for an alternative consent pathway suggest that there should be provision for further intensification beyond what has been lawfully authorised under existing resource consents. Again therefore, for the same reasons, the proposal for an alternative consent pathway does not lead to degradation of water quality.
- (e) Furthermore, the alternative consent pathway does not relieve a consent applicant of any obligation to provide detailed information to the Canterbury Regional Council regarding its activities. The

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<sup>16</sup> In the preamble to the NPSFM, in the context of the national bottom lines, the NPSFM states: "National bottom lines in the national policy statement are not standards that must be achieved immediately. Where freshwater management units are below national bottom lines, they will need to be improved to at least the national bottom lines over time. It is up to communities and iwi to determine the pathway and timeframe for ensuring freshwater management units meet the national bottom lines. Where changes in community behaviours are required, adjustment timeframes should be decided based on the economic effects that result from the speed of change. Improvements in freshwater quality may take generations depending on the characteristics of each freshwater management unit."

alternative consent pathway of necessity will entail the provision of nutrient information which is then available to the Council. Accordingly, the Council's establishment and operation of freshwater quality accounting systems under the NPSFM should not be compromised.

### **Jurisdiction for changes sought by RDRML**

54. The changes sought to Plan Change 5, as set out in the Annexures to the Statement of Evidence of David Greaves, are either sought in RDRML's submission or in other original submissions which RDRML supported by way of further submission.

### ***A short adjournment?***

55. One of the solutions suggested by RDRML's planning consultant David Greaves, is a short adjournment of 3-4 months to enable agreement to be sought on an appropriate set of fertiliser and irrigation proxies. Mr Greaves says that:<sup>17</sup>

I expect a three to four month deferral period would be appropriate, with corresponding directions that a facilitated process be entered into, involving the caucusing of the irrigation and fertiliser experts.

56. This would not in itself constitute a decision on submissions, and nor would any agreement (if reached) automatically constitute a decision. However, in my submission, with the involvement of relevant experts, it is a process which would assist the Commissioners in making appropriate decisions on submissions.
57. Procedurally, in my submission, the Commissioners have broad powers regarding the evidence they can receive. In particular:
- (a) Section 62(1) of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 provides that "Except as expressly provided otherwise in this subpart, the

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<sup>17</sup> Statement of Evidence of David Greaves dated 22 July 2016, paragraph 4.13, 5.24.

provisions of the RMA apply, as far as they are relevant, to any proposed regional policy statement or plan."

- (b) Section 39(1) of the RMA enables the Commissioners (as persons given authority to conduct hearings under s 34A RMA) to establish a hearing procedure that is appropriate and fair in the circumstances.
- (c) Section 41 of the RMA provides that section 4B of the Commissions of Inquiry Act 1908 apply to every hearing conducted by a person given authority to conduct hearings under s 34A RMA (as is the case here).
- (d) Section 4B(1) of the Commissions of Inquiry Act 1908 provides that:

The Commission may receive as evidence any statement, document, information, or matter that in its opinion may assist it to deal effectively with the subject of the inquiry, whether or not it would be admissible in a Court of law

58. In my submission these powers are broad enough to direct, or at least seek, that relevant experts engaged by the Council and called by submitters in relation to the irrigation and fertiliser proxies caucus/conference and provide the Commissioners with any resulting agreement, or a statement of areas of agreement and disagreement.

59. In the present case the Commissioners have received extensive evidence from qualified and experienced experts setting out their concerns with the irrigation and fertiliser proxies. This includes:

- (a) In relation to the fertiliser proxy specifically, evidence from:
  - (i) Dr Stewart Ledgard, a soil scientist with more than 30 years' experience with a particular speciality in nitrogen cycling in agricultural systems.<sup>18</sup>

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<sup>18</sup> Statement of Primary Evidence of Dr Stewart Francis Ledgard for Dairy NZ Limited dated 22 July 2016.

- (ii) Dr Bruce Thorrold, a scientist with a Bachelor of Agricultural Science (Hons.1) (1984) majoring in Agronomy, and a Ph.D. in Soil Science (1994) from Lincoln University.<sup>19</sup>
  - (iii) Dr Alister Metherell, also a soil scientist with a broad range of experience across government, local government and industry.<sup>20</sup>
- (b) In relation to the irrigation proxy specifically, evidence from:
- (i) Ian McIndoe, an engineer with nearly 40 years' experience in water resources, hydrology and irrigation related work.<sup>21</sup>
- (c) In relation to actual examples of OVERSEER® files being subjected to the irrigation and fertiliser proxies through the GMP Tool evidence from:
- (i) Reuben Edkins who holds (in addition to a Master of Commerce (Agricultural)) the Certificate of Completion in Advanced Sustainable Management from Massey University, this being the qualification required to be held by an "Accredited Farm Consultant" under the LWRP.<sup>22</sup>
  - (ii) Eva Harris who also holds (in addition to other qualifications) the Certificate of Completion in Advanced Sustainable Management from Massey University.<sup>23</sup>

60. Furthermore, in respect of the alternative irrigation proxy suggested by INZ, RDRML notes that it has been unable to verify the effect of the proposed proxy by running its example farm scenarios through an adjusted version of the Farm Portal. Without the ability to put a range of OVERSEER® files through an adjusted version of the Farm Portal using the revised irrigation proxy as suggested by INZ (along with the revised fertiliser proxy), it is very difficult to meaningfully determine the cumulative effect of these proposed revisions on N

<sup>19</sup> Statement of Primary Evidence of Dr Bruce Thorrold for Dairy NZ Limited dated 22 July 2016.

<sup>20</sup> Primary Evidence of Alister Metherell on behalf of Ravensdown Limited dated 22 July 2016.

<sup>21</sup> Statement of Evidence of Ian McIndoe dated 22 July 2016.

<sup>22</sup> Statement of Evidence of Reuben John Edkins dated 22 July 2016.

<sup>23</sup> Statement of Evidence of Eva Harris dated 22 July 2016.

loss estimates. Therefore it is extremely difficult to determine the likely catchment wide or scheme wide effect of these proposed proxy revisions, let alone compare them with the estimated reductions set out in the s 32 report.

61. In my submission, testing the alternative proxies is further information which would assist the Commissioners in making a decision as to whether they are suitable substitutes for the notified proxies. (This could of course occur in a caucus/conference context, or by way of questions from the Commissioners to the reporting officers).
62. I acknowledge that delay would be a consideration as to whether the Commissioners would seek to receive further evidence. In my submission, a short adjournment would not result in unreasonable delay. With Plan Change 5 having been notified on 13 February 2016, decisions could still be issued well within the 2 year timeframe prescribed by clause 10(4)(a) of the First Schedule to the RMA. I also note that no rebuttal evidence took issue with Mr Greaves' suggestion.

## **Conclusion**

63. RDRML wholeheartedly supports the adoption of Good Management Practices on farms within its irrigation schemes.
64. It would support moves to streamline this through a user friendly tool such as the Farm Portal.
65. Unfortunately, its experience is that there is an apparent disparity between the estimated reduction in nitrogen losses assessed in the section 32 report and the reduction which RDRML has estimated using actual examples. In the first instance, RDRML is keen to look at how the process can be made more accurate – the Farm Portal is after all a software application applied to uploaded OVERSEER® nutrient budgets (which have themselves been modelled) which provides "estimated" nitrogen loss rates.
66. It is submitted that there is a need to maintain an evaluative consent pathway so as to avoid unforeseen consequences, not only for individuals who may default to prohibited activity status, but also for irrigation schemes where

Policy 4.41C currently looks to *limit* nitrogen loss rates based on the average nitrogen loss rate below the root zone, as *estimated* by the Farm Portal, for the farming activity carried out during the nitrogen baseline period if operated at good management practice.

**DATED** at Oamaru this 6<sup>th</sup> day of September 2016



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Vanessa Hamm  
Counsel for Rangitata Diversion Race Management Limited