

IN THE MATTER

of the Resource
Management Act 1991
(RMA)

AND

IN THE MATTER

Plan Change 5 to the
Canterbury Land &
Water Regional Plan
(CL&WRP)

TO BE HEARD BY

Canterbury Regional
Council

HEARING DATE

July 2016

**Statement of Evidence of Christopher Adrian Hansen on Behalf of the Hurunui
Water Project**

22 July 2016

Introduction

1. My name is Christopher Adrian Hansen and I am a Director and Senior Planning Consultant with Chris Hansen Consultants Ltd. My qualifications are a Bachelor of Regional Planning (Hons) from Massey University (1980). I am a full member of the New Zealand Planning Institute and a member of the Resource Management Law Assoc., and I am a certified Hearings Commissioner. I have over 34 years' experience in planning and resource management.
2. I have particular experience in the review and assessment of regional plans and the preparation of submissions, attendance at hearings providing expert planning evidence, and in mediation to resolve appeals.
3. I provide the following statement of evidence in support of the further submission lodged by the Hurunui Water Project (HWP) to submission received on proposed Plan Change 5 (PC 5) to the Canterbury Land & Water Regional Plan (CL&WRP). I assisted HWP prepare its further submission.
4. Although not necessary in respect of council hearings, I can confirm I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the hearing committee. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Background

5. The proposed PC 5 seeks to deal with the management of the effects of land uses, particularly farming activities, on water quality throughout the Canterbury region and the management of water quality in the Waitaki sub-region, and flows in Whitney's Creek.
6. Proposed PC 5 comprises two parts: Part A consists of provisions which apply throughout the Canterbury region; Part B consists of provisions that apply to the

Waitaki sub-region only, and is proposed to be inserted as "*Section 15B Waitaki Sub-region*" into Section 15 of the Canterbury Land and Water Regional Plan.

7. The Hurunui Water Project Limited (HWP) was formed in June 2008 by four founding shareholders: Hurunui Irrigation and Power Trust, Ngai Tahu Property, MainPower New Zealand Limited and David Teece, the owner of Eskhead Station.
8. This group was previously known as the Hurunui Community Water Development Project and it operated as a Working Group until it became a limited company. Since 2002 it has been assessing the feasibility of a water storage scheme, including possible locations and options in the Hurunui district with grants from the Ministry of Agriculture's Sustainable Farming Fund, the Community Irrigation Fund and its successor the IAF but mainly from substantial and local contributions and shareholding.
9. The HWP has developed the Waitohi Irrigation Hydro Scheme (the 'Waitohi scheme') which involves the development of a series of water storage dams on the Waitohi River, and an on-plains storage dam, to provide for a community irrigation scheme to in the fullness of time irrigate up to 58,500 ha of land in the Hurunui, Waipara and Kowhai catchments. HWP has approached the consenting for the Waitohi scheme in two phases: Phase One involves the gaining of regional water consents from Environment Canterbury to take, use, divert, dam and discharge water from the Hurunui and Waitohi Rivers and the scheme irrigation network, and a change in land use consent (Phase One resource consents). Phase Two will follow the detailed design of the dam structures and irrigation infrastructure, and involves land use consents (from Hurunui District Council and Environment Canterbury) to construct the Waitohi scheme (Phase Two resource consents).
10. In August 2013 the HWP were granted by Environment Canterbury the Phase One resource consents, which were subsequently appealed to the Environment Court. These consents were confirmed in December 2015. HWP has also recently been granted a change in land use consent under the Hurunui Waiiau River Regional Plan (HWRRP) that allows for the likely uses resulting from the scheme within the Hurunui sub-region of the CLWRP.

11. However, a small part of the Waitohi scheme is within the Waipara and Kowhai Catchments and HWP has not yet applied for water discharge or change in land use consents for this part of the scheme which are subject to the provisions of the CLWRP, and proposed PC 5. The CLWRP has a consenting pathway for irrigation schemes through Rules 5.60 – 5.62 which are not subject to change by proposed PC 5, but individual farmers within any future Waitohi scheme may be affected by the provisions of PC 5.
12. It is within this context HWP lodged a further submission to three original submitters that have raised matters of particular interest to the HWP's Waitohi Project. The RMA provides for a party to lodge a further submission if it complies with the requirements of Schedule 1 Clause 8 (1) which states:
- The following persons may make a further submission, in the prescribed form, on a proposed policy statement or plan to the relevant local authority:
- (a) any person representing a relevant aspect of the public interest; and
 - (b) any person that has an interest in the proposed policy statement or plan greater than the interest that the general public has; and
 - (c) the local authority itself.
13. HWP considers it qualifies to lodge a further submission under Clause 8 (1) (b) as a party that has an interest in proposed PC 5 that greater than the interest that the general public has. I agree with this view.

Outline of Evidence

14. In my evidence I have adopted the following simple structure:
- a) Identification of the key points made by the original submitter and the relief they seek;
 - b) An outline of HWP's further submission point;
 - c) A brief review of the s.42A Report comments and recommendations;
 - d) A brief planning comment.

SUBMITTER – HUNTER DOWNS DEVELOPMENT COMPANY LIMITED (HUNTER DOWNS IRRIGATION)

15. HWP further submitted on 9 matters submitted on by Hunter Downs.

Definition of ‘Farm Portal’; Schedule 28, and all Provisions that rely on the Farm Portal

16. Hunter Downs Irrigation (HDI) [submission point C16C/30982.141] expressed concern that particular care needs to be taken to ensure the ‘Baseline GMP Loss Rate’, ‘GMP Loss Rate’, and the ‘Nitrogen baseline’ (for example), along with the plan provisions that rely on these definition/calculations, are not used as a means to restrict development of irrigation within the HDI scheme.
17. In particular, HDI noted water users who join the HDI scheme and convert to irrigation will in most cases have nitrogen losses that are higher than their nitrogen baseline. Equally, if Baseline GMP Loss Rates and GMP Loss Rates are to apply, they need to apply to the extent that they assume irrigation and irrigated land use (and not the farming activity that was occurring prior to irrigation). HDI also noted that irrigation schemes will continue to be consented through Rules 5.60 – 5.62 of the CLWRP, and there is no explicit requirement for the Farm Portal to apply to the management of nutrients within a scheme.
18. HDI sought for the Farm Portal to provide accurate outputs that correctly reflect GMP as they were understood at the time of preparing the plan change, providing:
 - a) The Farm Portal and the requirement to comply with it do not apply to individual properties where those properties are receiving water from an irrigation scheme and the irrigation scheme is required under resource consent to account for the nutrient losses; and/or
 - b) That the Farm Portal is used/structured to manage properties converting to irrigation;
 - c) That flexibility is retained to select on-farm GMP that are tailored to the property and not overly prescriptive – including provision for an alternative consenting pathway that does not rely on the outputs of the Farm Portal.
19. HWP supported HDI’s suggested approach as it represents sound resource management practice.

20. The s.42A Report assesses submissions on the Farm Portal in Section 6 (pages 36 – 43). The Council Officer determines that, after considering the Section 32 reporting, the additional technical reporting provided in response to specific submission points and the feedback from the CRC team implementing the Farm Portal, the Farm Portal is adequately robust and outputting what is considered to be reasonable and appropriate GMP adjusted nitrogen leaching rates. The Council Officer notes that the Farm Portal is based on industry input on the proxies, which are based on the industry agreed GMPs [paragraph 6.93].
21. The s.42A Report goes on to state that in the absence of an alternative that provides for fair and equitable generation of GMP Loss Rates, delaying the application of the Farm Portal and subsequently delaying awareness and compliance with nitrogen loss rates associated with GMP, would significantly reduce the effectiveness of PC5 in achieving the CLWRP objectives [paragraph 6.94]. The s.42A Report does not directly address Hunter Downs concerns, and does not recommend any amendments as sought by the submitter.
22. The HDI submission expresses a number of key concerns shared by HWP. While the Farm Portal as a planning tool is supported in principle, it needs to be robust and accurate, and I agree with HDI that care needs to be taken not to restrict development of irrigation. I note the Council Officer's conclusion that the Farm Portal is adequately robust and the outputs are considered to be reasonable and appropriate. I am aware of the Primary Sector position that is contrary to the Council Officer's opinion, and I am also aware of technical evidence to be presented at the hearing that provides justification for concern with the robustness and appropriateness of the Farm Portal.
23. The concern raised by HDI relating to the need for the Farm Portal to accommodate future irrigation has not really been addressed in the s.42A Report. This matter is of direct interest to HWP for that part of the Waitohi scheme outside the jurisdiction of the HWRRP.
24. I agree with the concerns expressed, particularly when considering the change in land use (such as from dryland to dairy) and the possible increase in nitrogen loss that may occur. In my opinion, some flexibility will be required for water users who join an irrigation scheme without restricting them to nitrogen baseline prior to irrigation.

Otherwise the incentive to join an irrigation scheme is reduced, and the ability of the water user to get returns on their investment will be limited. This seems contrary to the Objective 3.5 of the CLWRP that intends for land uses continue to develop and change in response to socio-economic and community demand.

25. As requested by HDI, I consider it is important for the Baseline GMP Loss Rate and GMP Loss Rate to assume irrigation, and that the consenting pathway for irrigation schemes retained.
26. I recommend the amendments sought by HDI that are supported by HWP be adopted.

Baseline GMP Loss Rate Definition

27. HDI [submission point C16C/30982.67] expressed concern that the Baseline GMP Loss Rate would not work for those properties who change from dryland to irrigation. HDI sought an amendment to the definition of '*Baseline GMP Loss Rate*' to ensure the definition does not apply directly to the management of irrigation scheme losses. In this context irrigation schemes continue to be consented through Rule 5.41A, and 5.60 to 5.62 which provides greater flexibility in terms of how the Farm Portal might or might not apply.
28. HWP agreed with this request as it considers the submitter is correct in its interpretation of the CL&WRP rules and the amendment is necessary to the definition to clarify this point.
29. The s.42A Report assesses submissions related to the Baseline GMP Loss rate in Section 6 (pages 46 – 49). The Council Officer considers it is not appropriate to apply the highest annual loss rate where there is a change from dryland to irrigation as this would introduce a risk of increased nitrogen loads, particularly in Red and Lake NAZs. The Council Officer also considers Rule 5.41A adequately provides for irrigation that may have occurred in the four-year period relevant to the Baseline GMP Loss Rate and the GMP Loss Rate, and changes to the definition are not required.
30. This matter follows on from the concern expressed above for the need for the baseline GMP Loss rate to provide for the change of land use from dryland to irrigation. As I understand the proposed PC 5, the baseline GMP Loss Rate is required to be met after 1 July 2020 (Policy 4.38C). HDI has suggested as a solution to meet this concern for

the Baseline GMP Loss Rate to be amended to clearly state that it does not apply to the management of irrigation schemes to be consented through Rules 5.60 – 5.62. In my opinion, this solution has merit.

31. I note that HDI has not included any possible wording in its submission, and I would recommend a simple Note to be added to the end of the proposed PC 5 definition as follows. While I support most of the Note suggested, I do not consider it should reference Rule 5.41A my understanding is that this rule relates to an individual farmer and not an irrigation scheme. I recommend the Note should read:

Note: The Baseline GMP Loss Rate does not apply to those irrigation schemes either permitted under Rules ~~5.41A and~~ 5.60, or consented under Rules 5.61 – 5.62.

Nitrogen Baseline Definition

32. HDI [submission point C16C/30982.86] expressed concern regarding the Baseline GMP Loss Rate and conversion from dryland to irrigation, as discussed above. HDI sought an amendment to the definition to read:

- d) in the case of an irrigation scheme, the maximum, as included in a resource consent:
- i) rate at which nitrogen may be leached from the properties supplied water by the irrigation scheme or principal water supplier; or
 - ii) concentration of nitrogen in drainage water leached from the properties supplied water by the scheme or principal water supplier.

33. HWP agreed that if the Baseline GMP Loss Rate does apply to irrigation schemes, further amendment is required to address the conversion of dryland properties to irrigation.
34. The s.42A Report recognises the HDI submission in paragraph 7.237 (page 108). However, it fails to assess the submission, and makes no recommendation to amend the definition as requested.
35. The same concerns as discussed above apply to the Nitrogen Baseline, and I consider the amendment proposed by HDI is appropriate and necessary, and adds clarity for the interpretation of the Plan. I recommend this amendment be adopted.

Policy 4.11

36. HDI [submission point C16C/30982.89] considered limiting the duration of resource consents is potentially problematic, especially with the level of investment required in

irrigation infrastructure and gaining finance for short term consent durations. HDI also expressed concern with the reference to the Council's Progressive Implementation Programme as it is unclear how the policy will implement this programme. HDI sought for Policy 4.11 to either be deleted, or if retained, amended to include effective review conditions that should be relied upon to achieve specific catchment water quality and quantity outcomes. Proposed amendments are provided by HDI in its submission.

37. HWP supported either deleting the policy, or if it is retained, amended as requested. The amendment is considered to represent sound resource management practice.
38. The s.42A Report recognises HDI's submission in paragraph 10.26 (page 190). The Council Officer does not accept a longer duration is appropriate and no amendments to Policy 4.11 are recommended.
39. I agree with the concerns expressed by HDI regarding Policy 4.11, which is directly relevant to HWP's Waitohi scheme. HWP is in the process of securing funding for its scheme, and gaining water use and discharge consents, and land use consents for a 35-year duration has been critical for ensuring certainty for the long term investment in the scheme, which is substantial. In my opinion, Policy 4.11 should be deleted as it is not necessary or appropriate. Council should retain its ability to provide for longer term consents, or limit the duration of consents if appropriate, through the consenting process.
40. I recommend the request by HDI to delete Policy 4.11 be adopted.

Policy 4.37 to Policy 4.38E

41. HDI [submission point C16C/30982.91; 93 – 99] expressed concerns regarding consented irrigation schemes (which are part of the existing environment) that are not fully implemented being restricted by the Baseline GMP Loss Rate on individual properties within the scheme. HDI sought an explanation be added that clarifies that Policies 4.37 to 4.38E only apply to individual farming activities and farm enterprises, and not irrigation schemes. A suggested explanation is included in the HDI submission, and reads:

Policies 4.37 to 4.38E only apply to individual farming activities and farming enterprises. Irrigation Scheme nutrient losses are to be managed through policies 4.40 to 4.41D.

42. HWP agreed that an explanatory note is required to make it clear that policies 4.37 to 4.38E do not apply to irrigation schemes.
43. The s.42A Report recognises HDI's submission in paragraph 7.236 (page 107/108) and paragraph 8.249 (page 171). However, it fails to assess the submission, and makes no recommendation to include the explanatory note as requested.
44. I agree that this clarification is appropriate and necessary, particularly as irrigation schemes specifically addressed in Policy 4.41D are consented separately under Rules 5.60 – 5.62 that are not the subject of proposed PC 5. I recommend the explanatory note recommended by HDI be adopted.

Policy 4.41D

45. HDI [submission point C16C/30982.120] expresses concern the term "*all land subject to any permit granted*" included in the policy is unclear. It is assumed that the intended reference is to properties that are actually supplied water by the scheme. HDI sought amendments to Policy 4.41D that provide greater clarity as to how the nutrients are to be accounted for and will reduce the uncertainty in this area. Suggested wording is included in the HDI submission that reads (~~strike-out text to be deleted~~; underlined text to be added):
 - (b) how nutrients from all ~~land subject to~~ properties supplied with water under any permit granted to the scheme or principal water supplier will be accounted for, including whether the nutrient losses from properties that are only partially irrigated by the scheme or principal water supplier are proposed to be fully accounted for by the scheme or managed by the individual property; and
46. HWP supported the request and considers this clarity is important to provide guidance to council staff and decision makers.
47. The s.42A Report addresses submission regarding Policy 4.41D in Section 7 (pages 106 – 111). The s.42A Report does not specifically recognise HDI's submission, and does not recommend any amendment to Policy 4.41D.
48. The phrase of concern to HDI is found in Clause (b) of Policy 4.41D which reads:

(b) how nutrients from **all land subject to any permit granted** to the scheme or principal water supplier will be accounted for; and ... (emphasis added)

49. I agree that this phrase is confusing and requires clarification. This is particularly relevant to HWP for the Waitohi scheme that will be built and stages, and the requirement should only apply to that part of the land (in HWP's case the Waipara and Kowhai Catchments) when it receives water from the scheme. I recommend the wording proposed by HDI be adopted.

Schedule 28 (and the Farm Portal)

50. HDI [submission point C16C/30982.141] expressed concern (based on work undertaken by the Primary Sector) with errors within the proxies/inputs for the Farm Portal. These concerns specifically relate to the fact that irrigation triggers have not been appropriately refined for different soil types; and the fertiliser calculation is not robust. HDI sought an amendment to the explanation to Schedule 28 to address the intent of the proxies and to address a real concern that the errors within the proxies/inputs for the farm portal are flawed and that it needs further work to ensure it is accurate and reflects GMP. Suggested explanatory note included in the HDI submission reads:

The proxies are not intended to be overly prescriptive and by their nature it will not be possible for proxies to represent capture every farming activity. An alternative consenting pathway (that does not rely on the proxies) is therefore set out in rules. The intent of the proxies and the Farm Portal is that they reflect the industry defined Good Management Practices.

51. HWP supported the intent of the amended explanation and agrees with the concerns raised.
52. The s.42A Report recognises HDI's submission in paragraph 6.101 (page 44). However, the Council Officer fails to assess HDI's request for an explanatory note, and no amendments are recommended to Schedule 28.
53. As I have discussed above, I am aware that expert technical evidence will be provided on behalf of the Primary Sector that addresses the errors with the proxies/inputs into the Farm Portal. I am also aware that the expert planning evidence of Fonterra, supported by expert planning evidence I prepared on behalf of Ravensdown Limited,

proposes a new policy and discretionary activity rule as an alternative consenting pathway that would address the submission by HDI. I consider the recommended explanatory statement proposed for Schedule 28 compliments the matters raised in Primary Sector evidence. I recommend the explanatory statement to Schedule 28 proposed by HDI be adopted.

SUBMITTER – HOBAN J K W AND OTHERS

54. HWP further submitted on 3 matters submitted on by Hoban J K W and Others:

Policy 4.34; Policy 4.36 to Policy 4.41D

55. Hoban J K W and Others [submission point C16C/30886.2230; 2833; 2834; 2835; 2836; 2837; 2838; 2841; 2850; 2857; 2860; 2861; 2862; 2863; 2864; 2865; 2866; 2867] express concern that the policies assume the water classifications for the zones in the CLWRP are correct and that poor water quality is the result of farming activities. The Council's own information and evidence of the CLWRP shows that this isn't always the case. Hoban J K W and Others sought an amendment to the policies to provide flexibility to land users within nitrogen loss limits that are appropriate considering both the need for farmers to make reasonable use of their interests in their land, and the sensitivity of the environment.

56. HWP agreed with the request to have this recognition, and that the policies need to provide flexibility to address these matters.

57. The s.42A Report makes a reference to the submitter seeking an amendment to Policy 4.34 in Footnote 19 on page 15, otherwise the submitters submission and request are not acknowledged or assessed.

58. I agree with the concerns of the submitter that the policies should provide flexibility to land users within nitrogen loss limits that are appropriate. This is a similar concern as raised by HDI above regarding ensuring dryland conversion to irrigation is not unduly restricted so that a change in land use cannot occur.

Winter Grazing – Rule 5.44A(4); Rule 5.54A(3); Rule 5.57B(3)

59. Hoban J K W and Others [submission point C16C/30886. 2249; 2251; 2253] do not support the current proposal for 20ha of land as it is not the area that is the determinant of nitrogen loss, but how the land is used. It is also not clear how the feeding of supplements relates to the 20ha proposed land area limit, and there is no exemption for the feeding of supplements to cattle during adverse climatic conditions. Hoban J K W and Others sought the deletion of Rules 5.44A, 5.54A and 5.57B and replacement with rules included in the submission. The submitters also sought the definition of ‘*winter grazing*’ to be amended to read:

Winter grazing means the grazing of weaned cattle from the period 01 May to 30 September in any year under conditions whereby the cattle are contained for break-feeding of forage crops (not pasture) at a stocking rate of more than 15su/ha, as part of normal farming activities. It does not include the containment of cattle and feeding of supplementary crops during adverse climatic events such as drought, flood or snow.

60. HWP agrees with this point, and the amendment sought by the submitter to the rules.
61. The s.42A Report does not recognise or assess the submitters submission. I note the s.42A Report does include a recommended amendment to the definition of ‘winter grazing’ so that it would read (underlined text added by proposed PC 5; red text amendments recommended in s.42A Report:

means the grazing of cattle within the period of 1 May to 30 September, where the cattle are contained for break-feeding of in-situ **brassica and root vegetable** forage crops ~~or supplementary feed that has been brought onto the property~~

62. I support the recommended amendment to the definition of Winter Grazing which I understand is in response to submissions made by the Primary Sector on this matter.

Map Showing High Sediment and Phosphorus Risk Areas

63. Hoban J K W and Others [submission point C16C/30886.2287] opposed the inclusion of the replacement map series that shows High Runoff Risk Phosphorus Zones, which have been prepared through a desk top exercise. The submitters consider the maps contain many generalisations and inaccuracies. Hoban J K W and Others consider the management of sediment or phosphorus loss should be identified and provided for in a catchment planning process in the sub-regional sections.

64. HWP supports the request of the submitter and sees the need for a catchment solution as necessary and consistent with good management practices.
65. The s.42A Report does not recognise or assess the submitters submission. The High Runoff Risk Phosphorus Zones are retained.
66. I agree with the submitter's concerns regarding the appropriateness and accuracy of the maps that have been prepared through a desk top exercise. I also agree that the management of phosphorus is better addressed at the sub-catchment level. I see little merit in having the zones and maps at a regional-wide level. I recommend the High Runoff Risk Phosphorus Zones be deleted from the planning maps.

AMURI IRRIGATION COMPANY LIMITED (AIC)

67. HWP further submitter on 5 matters submitted on by the Amuri Irrigation Company:

Introduction and Extent of PC 5

68. AIC [submission point C16C/50040.943] opposed the extent of PC5 and quotes the s.32 Evaluation report that clearly states that no part of PC5 applies to the Hurunui, Waiau and Jed River Catchments, which are managed by the Hurunui and Waiau River Regional Plan (HWRRP). AIC considers that specific reference is needed via a footnote or similar reference to the fact that PC5 policies and rules do not apply to the Hurunui, Waiau, and Jed River catchments which are managed by the HWRRP.
69. HWP agreed that this clarification is required to provide certainty to the plan reader and to ensure the HWRRP provisions are retained separate to the PC 5 provisions.
70. The s.42A Report recognises AIC's submission in paragraph 108 (page 187). However, the Council Officer fails to assess AIC's request for an explanatory note, and no footnote is recommended.
71. I agree that there is some uncertainty regarding the area of jurisdiction on proposed PC 5, particularly when the High Runoff Risk Phosphorus Zones on the planning maps cover the area the jurisdiction of the HWRRP. As AIC point out, the s.32 Evaluation

Report makes it clear, but proposed PC 5 does not. I recommend the footnote or reference that specifically states that the provisions of proposed PC 5 do not apply to the area the jurisdiction of the HWRRP be adopted.

High Runoff Risk Phosphorus Zones

72. AIC [submission point C16C/50040.947] opposed the introduction of the High Runoff Risk Phosphorus Zones to the planning maps, and in particular that they cover areas contained within the HWRRP. AIC sought the deletion of the High Runoff Risk Phosphorus Zones within maps which are covered by the HWRRP.
73. HWP agreed with this request as it considers this area is already covered by the HWRRP and the PC 5 provisions should not cover this area.
74. The s.42A Report recognises AIC's submission in paragraph 8.272 (page 175). However, the Council Officer fails to assess AIC's request for an explanatory note, and Phosphorus Risk Zones and planning maps are recommended to be retained as notified.
75. I have discussed this matter above. I recommend deletion of the High Runoff Risk Phosphorus Zones within the maps.

The Farm Portal Mechanism

76. AIC [submission point C16C/50040.963] opposed (in part) the Farm Portal mechanism and the deficiencies apparent in the Farm Portal as it exists. AIC questions the appropriateness of the outcomes that are likely to be achieved as a consequence of the implementation of the Farm Portal as it exists at the time of public notification. AIC sought a peer review (by an appropriately qualified and experienced independent expert in nutrient modelling) of the detail set out in the Farm Portal. The objective of the peer review would be to determine if the Farm Portal accords with the Modelling Rules set out in Schedule 28.
77. HWP supported this request, and considers there is sufficient concern and uncertainty regarding the accuracy and usefulness of the Farm Portal mechanism to warrant a review.

78. The s.42A Report recognises AIC's submission in paragraph 6.69 (page 40). Discussion on whether there is jurisdiction to grant the relief sought in this submission can be found at Section 3. The Council Officer determines that, after considering the Section 32 reporting, the additional technical reporting provided in response to specific submission points and the feedback from the CRC team implementing the Farm Portal, the Farm Portal is adequately robust and outputting what is considered to be reasonable and appropriate GMP adjusted nitrogen leaching rates. The Council Officer notes that the Farm Portal is based on industry input on the proxies, which are based on the industry agreed GMPs [paragraph 6.93].
79. I have discussed above in my evidence the Primary Sector concerns regarding the Farm Portal, and the same comments apply here. I note AIC proposes a peer review of the detail of Farm Portal, and to some extent this peer review will be provided to the hearings panel in expert technical evidence on behalf of the Primary Sector. Amendments to Schedule 28 may eventuate from this expert evidence.

Policy 4.11

80. AIC [submission point C16C/50040.947] opposed the duration limits contained in the policy. AIC considers having different consent terms applying outside of a catchment to within it could threaten irrigation company's Environmental Management Systems, and constraining the consent term for a catchment to a shorter term that applies (in accordance with Policy 4.11) to different command areas would be arbitrary and have little foundation in the RMA's purpose. AIC sought the deletion of Policy 4.11.
81. HWP agreed with the request and considers Policy 4.11 is unnecessary and inappropriate.
82. The s.42A Report recognises AIC's submission in paragraph 10.24 (page 189). The Council Officer does not accept a longer duration is appropriate and no amendments to Policy 4.11 are recommended.
83. I note my comments above on the same matter raised by HDI. AIC have also provided a further concern relating to its ability to implement its EMS, which I agree is a valid point. I recommend Policy 4.11 be deleted as sought by AIC.

Policy 4.41C

84. AIC [submission point C16C/50040.1008] noted its existing resource consent has a calculated nitrogen load that can be discharged. AIC administers that load as a whole, and is working towards reducing its load (as a whole) to GMP. AIC seeks an amendment to Policy 4.41C to make it plain that irrigation schemes and principal water suppliers can continue to manage their water on an aggregated basis, rather than requiring farm-by-farm compliance, which could bring about additional costs (for farmers) and reduce efficiencies that the Company has introduced through its EMS. AIC sought a new limb (Limb (c)) to be inserted into Policy 4.41C that reads:

An application is to specify if the irrigation scheme or principal water supplier is to manage the nutrient load associated with the discharge permit on a 'property by property basis' or aggregated across the command area of the scheme or supplier.

85. HWP supported the request and considers the amendment is necessary and appropriate, and represent sound resource management planning.

86. The s.42A Report recognises AIC's submission in paragraph 7.230 (page 107). The Council Officer considers it is unclear how an irrigation scheme or a supplier would be able to manage the aggregated load limit without having a clear understanding and oversight on what is occurring on each property. The Council Officer notes that the command area of a scheme may be greater than the total area irrigated (for example, irrigation schemes typically hold a water permit for the use of water to irrigate a total area of land within a wider command area), meaning that if the policy is amended to manage the nutrient load "aggregated across the command area of the scheme or supplier", then the total load attributed to the scheme could exceed the corresponding area that is authorised to be irrigated. The s.42A Report does not recommend the submission from AIC is accepted.

87. I note Policy 4.41C reads (underlined text added by proposed PC 5; red text recommended by s.42A Report):

Maintain water quality in Orange, Green and Light Blue Nutrient Allocation Zones, and improve water quality in Red Nutrient Allocation Zones and Lake Zones by requiring:

- (a) any application for resource consent for the discharge of nutrients submitted by an irrigation scheme or principal water supplier to describe the methods that will be used to implement the Good Management Practices on any land that will be supplied with water from the scheme or principal water supplier; and⁸

(a) 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

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

88. I agree that the new Clause (c) is necessary to ensure it is clear how an irrigation scheme operates. In particular, I consider the clause sought provides flexibility to the scheme operator to manage nitrogen losses either by a property by property basis, or aggregate across the scheme. I consider Policy 4.41C does not currently provide for this flexibility, and the wording proposed by AIC is appropriate and necessary. I recommend the proposed Clause (c) be adopted.

Chris Hansen

22 July 2016