

Before Hearing Commissioners at Christchurch

under: the Resource Management Act 1991

in the matter of: Submissions on Proposed Plan Change 5 to the
Canterbury Land and Water Regional Plan

between: **Fonterra Co-operative Limited**
Submitter

and: **Canterbury Regional Council**
Respondent

Statement of evidence of Gerard Matthew Willis for Fonterra Co-operative
Limited

Dated: 22 July 2016

1 INTRODUCTION

- 1.1 My full name is Gerard Matthew Willis. I am a director of Enfocus Ltd, a resource management consultancy based in Auckland. I have practised as a planner and resource management specialist for the past 26 years.

2 QUALIFICATION AND EXPERIENCE

- 2.1 I hold a Bachelor of Regional Planning (Hons) degree from Massey University and am a full member of the New Zealand Planning Institute.
- 2.2 My previous experience includes working in policy and regulatory planning roles in local government both in New Zealand and in the United Kingdom. I also spent a considerable part of my early career in central government roles including as a senior policy analyst at Ministry for the Environment ("MfE") and environment adviser to the Minister for the Environment.
- 2.3 Since 2001 I have been a planning and environmental consultant, establishing my own practice in 2002. In that capacity I have acted for a number of district and regional councils on planning issues and provided advice to companies and government agencies. Of note, over recent years I have advised three different regional councils on the development of regional policy statements and/or plans.
- 2.4 I have also been involved in reform of freshwater management at the national level:
- (a) I was previously engaged by MfE under the Sustainable Water Programme of Action to advise on alternatives to first-in-first served allocation regimes and on barriers to tradable permits
 - (b) In 2010 I was engaged by MfE to assist in the Fresh Start for Freshwater Programme with specific involvement in water governance issues.
 - (c) In 2013 I was engaged by MfE to draft amendments to the National Policy Statement on Freshwater Management 2011 as part of the development of the National Policy

Statement on Freshwater Management 2014 ("**NPSFM**"), including the incorporation of the National Objectives Framework.

- (d) In 2016 I was engaged by MfE to provide independent comment on the workability of the proposed changes to the NPSFM.

- 2.5 I have previously been engaged by MfE to assist in the development of several other national policy statements.
- 2.6 My relevant experience also involves the preparation of evidence for hearings in relation to water quantity and/or quality matters in respect of Horizons One Plan, Variation 6 to Environment Waikato's Regional Plan, Proposed Change 6A to the Otago Regional Plan, the water allocation provisions of the Bay of Plenty Regional Policy Statement and, in Canterbury, the Proposed Hurunui and Waiau River Regional Plan and the Canterbury Land and Water Regional Plan ("**CLWRP**"), including Variations (now Plan Changes) 1 and 2 and Plan Change 3 to the CLWRP.

Background

- 2.7 My involvement in proposed Plan Change 5 to the CLWRP – ("**PC5**") commenced in February 2016 following its public notification. I was initially engaged to assist with the preparation of a submission on behalf of Fonterra. I was subsequently engaged by Fonterra to assist with preparing further submissions. In my capacity as independent planning adviser I worked with staff from Fonterra.
- 2.8 I am familiar with the provisions of PC5 to which these proceedings relate. In preparing my evidence I have reviewed the relevant parts of the section 32 Report and the section 42A Report. I have also read the supporting documentation of the Council, including in particular the following:
 - (a) Waitaki Limit Setting Process: Technical Overview, Report No.15/99;
 - (b) Memo on Nutrient Capacity of CLWRP Orange & Green Nutrient Management, 2016;

- (c) Canterbury Certified Farm Environment Plan ("**FEP**") Auditor Manual, February 2016; and
- (d) The Farm Portal – System Description and Requirements Document, Environment Canterbury Sam Ragnarsson / Wayne Stiven, 26 January 2016.
- (e) Lower Waitaki ZIP Addendum July 2015
- (f) Upper Waitaki ZIP Addendum July 2015

Code of Conduct

- 2.9 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

3 SCOPE OF EVIDENCE

- 3.1 In the course of preparing my evidence, I have undertaken a planning assessment of the provisions of PC5 in light of the submissions and further submissions of Fonterra.
- 3.2 My evidence is structured as follows;
- (a) Relevant planning instruments;
 - (b) An overview of PC5;
 - (c) The use of the Farm Portal as a planning tool;
 - (d) The need for a consenting pathway;
 - (e) The Good Management Practice Loss Rate ("**GMPLR**") and the sinking lid;
 - (f) Policy 4.38AB and the permitted baseline; and
 - (g) Miscellaneous issues in the Waitaki Catchment.

- 3.3 I have included a mark-up of proposed amendments to PC5, as Appendix 1 of my evidence. This mark-up shows the Council Officers' recommendations from the Section 42A Report with my suggested amendments.

4 EXECUTIVE SUMMARY

- 4.1 This evidence provides a planning analysis of four key proposals to amend PC5 as included in Fonterra's submission and further submissions. This includes an evaluation of the planning merits of the provisions that would be replaced. Those proposals and the justification for those proposals is as follows.

An alternative pathway

- 4.2 An alternative means of authorising farming activities operating at good management practice needs to be provided for in PC5 because, on the evidence of Mr Cullen, the Portal cannot be relied on to always generate a representative GMP loss rate limit. This will be true even if current issues associated with modelling proxies can be resolved. PC5 provides that no consent can be issued for a farming activity to exceed the Portal-generated Baseline GMP Loss Rate ("**Baseline GMP**"). This will cause an interference with some parties' ability to provide for their well-being that may be unreasonable given the apparent fallibility of the Portal.
- 4.3 The alternative pathway I propose is similar to that included in the Fonterra submission. However, some refinements have been included to improve its workability and the confidence that the public can have in its ability to adequately control nitrogen discharges and maintain and enhance water quality.
- 4.4 The pathway has the following planning components:
- (a) A new and additional Policy 4.38AB (in Part A) and 15B.4.13A (in Part B) that would provide a gateway test and associated obligations for qualifying farms to have their N loss limit defined by means other than the Portal. The gateway tests include that:

- the application must demonstrate that the Portal and/or OVERSEER® do not adequately represent the farm system; and
 - that N loss must not exceed a rate assessed by an Accredited Farm Consultant as being the GMP loss¹ rate using OVERSEER® and assuming the adoption of all Good Management Practices; and
 - A FEP must be prepared by an Accredited Farm Consultant who must certify that all applicable GMPs are adopted in the FEP.
- (b) A new discretionary activity rule in Part A and for each zone of Part B that enables farming activities that cannot meet the Portal-generated limit to apply for a full discretionary consent. This would be subject to the policy outlined above.
- (c) A nitrogen loss rate that exceeds the nitrogen baseline would remain a prohibited activity.

4.5 I have assessed the planning arguments against the alternative pathway as included in the Section 42A report and find that they either misunderstand the proposal as now conceived and/or misapply relevant planning policies and principles. In particular, addressing the issue of inaccurate Portal-generated limits through an approach to auditing and compliance that allows for continuing failure to meet the Portal-generated N loss limit without compliance action if all GMPs are adopted is not in my opinion, appropriate (if indeed that is what is intended).

¹ I propose that "Assessed Baseline GMP Loss Rate" be a new defined term being the N loss rate that is assessed as being the rate of N loss from a farming activity on the property in the 2009-2013 period assuming the use of all GMPs. This is to be estimated using OVERSEER®.

The GMPLR and the sinking lid

- 4.6 PC5 applies policies that require the limit on N loss to be set as the GMPLR if that rate is less than the Baseline GMP. That means that over time a nitrogen loss limit can go down but can never go up to a previous level. Although there are some sound reasons for that approach, my opinion is that such an approach should not be applied inflexibly.
- 4.7 That is because there may be sound and justified reasons why the N loss rate of the most recent four year period (the basis of the GMPLR calculation) is not representative of that farming system over a longer period (i.e. over the life of the consent or the life of a regional plan).
- 4.8 I propose a new and additional policy that provides guidance on when decision-makers should consider not imposing the GMPLR. That policy will require an assessment of whether there have been atypical conditions over the most recent four year period in terms of climate, market or other matters outside a farmer's control. To the extent that such conditions have occurred and the GMPLR (or assessed GMPLR rate²) is lower than it would otherwise be, the Canterbury Regional Council ("**CRC**") will have discretion about the extent to which a rate lower than the Baseline GMP will be imposed.

Policy 4.38AB – The permitted baseline

- 4.9 Policy 4.38AB states that when considering an application for a farming activity the adverse effects of any activity that is permitted must not be disregarded. In other words, it provides a clear direction that the permitted baseline will not apply.
- 4.10 I do not agree with that policy because there will be situations when the council may wish to disregard effects of activities that are permitted on the grounds that conditions adequately address effects or because the effects are certain to occur regardless of whether the application is approved or not.

² I propose that "Assessed GMPLR" be a new defined term being the annual N loss rate that is assessed as being the rate of N loss from a farming activity on the property over the most recent four year period assuming the use of all GMPs. This is to be estimated using OVERSEER®.

- 4.11 I support the deletion of Policy 4.38AB. Without that policy the CRC will have full discretion as to whether or not to apply the permitted baseline.

Waitaki Catchment issues

- 4.12 Three additional matters in are discussed in this evidence. These all relate to provisions in Part B of PC5 being:
- (a) Policy 15B.4.25 - Compliance with load limits in the Valley and Tributaries Freshwater Management Unit);
 - (b) Policy 15B.4.16 - Surface water takes and transfer in the Whitneys Creek zone; and
 - (c) Policy 15B.4.20 (d) - Adaptive Management Conditions.
- 4.13 No substantive issues are raised in relation to these matters but in each case, I make suggestions aimed at improving the clarity of the provision and its implementation.

5 RELEVANT PLANNING PROVISIONS

- 5.1 The key planning instruments relevant to the consideration of PC5 are listed in Appendix 1 to this evidence. In short, my assessment of the relevant instruments accords with that set out in the Section 42A Report. Generally my interpretation of those planning instruments and their application to PC5 also accords with that of the section 42A Report unless otherwise stated in this evidence. Specific instances where I have a different opinion are set out in paragraphs 10.18 to 10.31.
- 5.2 Of direct relevance to Fonterra's interests, PC5 must "give effect" to the National Policy Statement for Freshwater Management ("**NPSFM**"). Environment Canterbury must also give effect to the Canterbury Regional Policy Statement ("**CRPS**"). PC5 amends, and will be an integral part of, the CLWRP. For those reasons, I consider those instruments the most relevant to the planning assessment and hence feature most in the planning analysis that follows.

- 5.3 I acknowledge also that in accordance with Section 63 of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010, particular regard must be had to the Vision and Principles of the Canterbury Water Management Strategy (**CWMS**).
- 5.4 Finally, I am conscious that Part B of PC5 has been developed to implement the Lower Waitaki Zone Implementation Programme Addendum 2015 and the Upper Waitaki Zone Implementation Programme Addendum 2015.
- 5.5 Although there is no requirement at law for PC5 to give effect to the ZIPs or their Addendums those instruments have been developed with broad community discussion specifically to set the direction on managing issues with water management and, in my opinion regard should be had to them under Schedule 1, and 10(2)(b)(ii) of RMA. . This does not mean that it must be followed in all respects. Certainly Part 2 of the Resource Management Act 1991 (**the Act**) and statutory planning instruments must prevail in the event of conflict.

6 AN OVERVIEW OF PC5

- 6.1 PC5 has two distinct parts. Part A includes new region-wide provisions that replace various provisions of the CLWRP. Part B consists of the provisions for part of the Waitaki and South Coastal Canterbury sub region (being amendments to section 15 of the CLWRP including the creation of a specific sub section 15B which focuses specifically on the Waitaki).

Part A – Region wide provisions

- 6.2 The key feature of these new (Part A) provisions is the requirement for farmers throughout the region to achieve a nitrogen (**N**) loss rate that represents good management practice (**GMP**).
- 6.3 This follows from Plan Changes 1 and 2, which include provisions that seek reductions in N loss from a GMP baseline.

- 6.4 The difficulty with the concept of GMP is that it is not easily quantified and will vary by farm and farm system. Further there is often a degree of subjectivity in determining what would be good management practice for any particular farm.
- 6.5 To overcome these difficulties PC5 introduces the concepts of:
- (a) Good Management Practices (defined to be those practices specified in the documents *“Industry –agreed Good Management Practices relating to Water Quality”*, 18 September 2015; and
 - (b) The Farm Portal (**Portal**), being an online tool that generates a quantified nitrogen loss number that represents the N loss modelled to occur from the property if operated at good management practice. The Portal is discussed further in section 7 below.
- 6.6 As a consequence of the new ability (via the Portal) to calculate a GMP N loss number, Part A contains a raft of amendments to policies and rules requiring farmers to register in the Portal by 1 July 2017 and comply with a number generated by the Portal by 2020 (unless they are, and remain, a low leaching farm – a concept defined largely by limits on the extent of irrigation and winter grazing). Hence the Portal is the mechanism that generates bespoke limits for individual properties and their farming activities.
- 6.7 Importantly, Part A applies only to the extent that sub-regional chapter provisions (including those in Plan Changes 1, 2, 3, 4) do not otherwise apply. In other words, other zones will already have (and will retain) an alternative consenting pathway.

Part B

- 6.8 Part B consists of provisions that apply to the Waitaki sub-region. Those provisions make full use of the approach introduced by Part A of the Plan Change. That is, having set freshwater outcomes for the sub region, Part B proposes policies and rules to manage nutrients to achieve those in each of the ten zones within the four freshwater management units ("**FMU**") that make up the Waitaki sub-region. Although variable by zone, the provisions all place significant reliance on the Portal and the quantification of a nitrogen loss rate that represents GMP.
- 6.9 Some additional provisions address aquaculture and minimum flows and groundwater allocation limits for Whitney's Creek. This evidence discusses the Whitneys Creek flow provisions but not the aquaculture provisions, as they are not the subject of submission by Fonterra.

7 USE OF THE PORTAL AS A PLANNING TOOL

- 7.1 PC5 defines the Portal as follows:

Means the nutrient management database accessed at www.farmportal.ecan.govt.nz and that is used to derive a Baseline GMP Loss Rate and Good Management Practice Loss Rate, in accordance with Schedule 28.

- 7.2 The intent is that a farm will be registered in the Portal and information about the farming activity is reviewed and updated by the property owner (or their agent) every 24 months thereafter.
- 7.3 With the information entered, the Portal will generate a Baseline GMP and a GMPLR.
- 7.4 The Baseline GMP is defined as:

Means the average nitrogen loss rate below the root zone, as estimated by the Farm Portal, for the farming activity carried out during the baseline period, if operated at good management practice; and where a Baseline GMP loss rate cannot be generated by the Farm Portal it means the nitrogen baseline³.

³ Although provision is made in the definition of Baseline GMP for situation where the Portal cannot generate a Baseline GMP rate I do not understand this to extend to the situations described by Mr Cullen.

- 7.5 The GMPLR is defined as:

Means the average nitrogen loss rate below the root zone, as estimated by the Farm Portal, for the farming activity carried out over the most recent four-year period, if operated at good management practice.

- 7.6 These two loss rates are applied variably by rules as discussed later. For simplicity where in this evidence I refer to both the Baseline GMP and the GMPLR I use the term “**GMP limits**”.
- 7.7 The Portal works by applying a set of modelling “proxies” (being OVERSEER® settings, methodologies and rules) to the running of an OVERSEER® input file through the Portal’s GMP estimating tool. The modelling proxies are included in PC5 as Schedule 28. In simple terms, a users’ OVERSEER® file(s) and other information is loaded into the Portal and instead of generating what the farm’s N loss is estimated to be, the Portal generates an estimate of what the N loss *should* be assuming the farming activity was carried out at GMP.

Benefits of the Portal

- 7.8 In my opinion, in the context of managing diffuse farming discharges, the ability to calculate a discharge rate that represents what a farm operating at good management practice could be expected to discharge is important to developing a fair and effective planning response to issues of full or over-allocation of nutrients.
- 7.9 Further, the ability to make such a calculation in a consistent, repeatable and objective way is a significant advancement in nutrient management.
- 7.10 For those reasons, in broad terms, I support the use of the Portal as a planning tool (subject to the qualifications below).
- 7.11 Despite that general support, in my opinion, some care needs to be taken when using the Portal in a regional plan as proposed in PC5. That is for the simple reason that the Portal is new and has not been used before in the regional planning context. Although significant work has gone into its design there is no substitute for real life testing.

7.12 Two issues with the reliability and comprehensive application of the Portal have been raised. These are:

- (a) As noted above, the modelling relies on the use of proxies considered to be practices/situations typical of Canterbury farms operating at GMP. However, based on the evidence of Dr Ledgard and Dr Thorrold there appears to be considerable doubt as to whether the fertiliser proxy is representative of a broad range of farming systems found across Canterbury or otherwise the most appropriate given its particular characteristics, strengths and weaknesses. I understand that there are similar concerns about the irrigation proxy. Accordingly, indications are that for a significant number of farms the Portal will generate a GMP number, which, to be complied with, would require on farm system changes that go beyond good management practice; and
- (b) There are some farm systems (particularly highly intensive systems) that OVERSEER® is not designed to model. Although OVERSEER® has been used to model such systems it requires the user to adopt “work around” methods as described by Mr Cullen (paragraph 5.4 of his evidence in chief). An issue then arises that OVERSEER® files for such farms are likely to generate unpredictable and possibly fanciful GMP numbers when applied to the Portal. Again, in those circumstances compliance with the resulting GMP number may be impossible for that farm system to comply with, irrespective of what good management practices may be adopted.

7.13 While the issue outlined in (a) above may be able to be resolved through “fixes” to the proxies, the issue outlined in (b) does not appear to be easily solved meaning that for the foreseeable future there can be no assurance that all farming systems will receive a fair and accurate GMP limit via the Portal.

- 7.14 In my opinion these issues do not mean that PC5 ought not to make use of the Portal. They do, however, mean that the way the Portal is to be used should take account of the fact that it may not be a failsafe planning tool nor one that is applicable to every single farming activity that may arise now, or in the future.
- 7.15 In particular, it is my opinion that the Portal ought not to be used to generate an N loss limit that acts as a threshold for a prohibited activity status⁴. Such use risks imposing an unreasonable constraint on an activity that by other measures could well be operating at GMP.

8 NEED FOR AN ALTERNATIVE CONSENTING PATHWAY

- 8.1 The Fonterra submission seeks an alternative consenting pathway for those activities that cannot meet a Portal-generated GMP limit. As notified, PC5 provides no such pathway since the exceedance of a GMP limit is a prohibited activity (as discussed further below).
- 8.2 For the reasons set out above, and because of the way the Portal-generated GMP limits are imposed in PC5 I agree with that submission.

Use of the Portal in Part A of PC5

- 8.3 Compliance by 1 July 2020 with the Portal-generated Baseline GMP limit is imposed as a condition (or “standard”) of controlled and restricted discretionary activity (**RDA**) rules applying to farming activities in the Red, Orange, Green and Light Blue nutrient zones and as conditions of an RDA rule in the Lakes zone (where no controlled activity applies).
- 8.4 The GMPLR is also imposed as a condition of discretionary activity rules in respect of farming enterprises.

⁴ For the same reasons I do not consider it is an appropriate tool to set thresholds for permitted activity status. However PC5 does not use it in that way and hence I do not comment on that matter further.

- 8.5 More importantly, Rule 5.48A of Part A of PC5 makes any farming activity in the Red Zone that, from 1 July 2020, exceeds the Baseline GMP a prohibited activity. Similarly, Rule 5.52A makes any farming activity in the Lakes Zone that exceeds the Baseline GMP a prohibited activity from the same date.
- 8.6 Farming enterprises that exceed the GMPLR are also prohibited activities under the same rules.
- 8.7 Farming activities in the Orange, Green and Light Blue zones that exceed the Baseline GMP from 1 July 2020 are non-complying activities.

Use of the Portal in Part B of PC5

- 8.8 A similar approach has been taken in Part B of PC5 in some (but not all) of the zones (i.e. specific catchments within the four identified **FMUs** of the Waitaki sub-region).
- 8.9 The rules across the ten zones are complex and have subtle variations between them but in general terms after 1 July 2020 non-compliance with the Baseline GMP can trigger prohibited activity status in the following zones⁵:
 - (a) Ahuriri and Upper Waitaki Hill;
 - (b) Hakataramea River and Hill;
 - (c) Hakataramea Flat; and
 - (d) Greater Waikakahi.

⁵ It is recognised that the Section 42A report recommends deleting this as a condition of the rules applying to the Hakataramea (River, Hill and Flat) zones and the Greater Waikakahi zone.

- 8.10 In the Haldon and Mid Catchment Zone⁶ of the Upper Waitaki FMU, the Valley and Tributaries FMU and in the Whitney's Creek Zone (of the Northern Fan FMU), non-compliance with a Portal-generated Baseline GMP is a restricted discretionary activity provided the "headroom"⁷ or catchment load is not exceeded. If the catchment loads are exceeded, an exceedance of the Portal-calculated Baseline GMP would also be prohibited.
- 8.11 Hence the rule structure of both Part A and Part B of PC5 relies heavily on the Portal. The appropriateness of the prohibited activity status in turn relies on whether the Portal is reliable. For most people undertaking farming activities there will be no opportunity to even present a case through a resource consent application that the N loss on a farm does represent GMP (even where the N loss may be well below their N baseline and the farming activity has not changed since the baseline period).
- 8.12 As noted earlier, it is my opinion that the questionable reliability of the Portal to generate fair and representative GMP limits for all farming systems means that PC5 should provide an opportunity for any farmer that cannot meet the Portal-generated GMP limit to apply for resource consent to test whether the limit accurately represents a farming activity operating as GMP. This is what the Fonterra submission has termed an "alternative pathway".

9 DESIGN OF AN ALTERNATIVE PATHWAY

- 9.1 The Fonterra submission proposed an alternative pathway. That proposal had the following key characteristics:

(a) New definitions of:

- "Loss Rate Assessed as Good Management Practice"; and
- "Loss Rate Assessed as Baseline GMP"

The definitions allow nitrogen loss rates to be estimated by OVERSEER® based on the adoption of Good Management Practices, rather than reliance on the Farm Portal.

⁶ Some transitional rules also apply but I have disregarded those for the purpose of this analysis.

⁷ Is a derivation of the load calculated on a kg/ha/yr basis using the formula in Schedule 27 of PC5

- (b) Amendments to all rules and policies referring to Baseline GMP and GMPLR so that they refer, as the alternative, to the “Loss Rate Assessed as Baseline GMP” and the “Loss Rate Assessed as Good Management Practice” respectively.
- 9.2 The net effect of the proposed provisions (as included in the Fonterra submission) is that a farming activity could qualify as a restricted discretionary activity even where it did not meet (from 2020) the Baseline GMP provided it met the Assessed Baseline GMP Loss Rate. Similarly where compliance with the GMPLR is required but could not be achieved, compliance with Assessed GMPLR would substitute.
- 9.3 While I support the general intent of the provisions proposed by Fonterra, for the reasons outlined below I believe that some amendment to those provisions is required. I outline the key amended provisions below and set out my proposed provisions in full in Appendix 1.

The importance of a clear gateway test

- 9.4 The one clear principle that needs to be borne in mind is that any alternative consenting pathway ought not undermine the existing management framework by rendering nugatory the existing prohibited activity rule.
- 9.5 In other words, the alternative pathway must not be open ended such that it “opens the flood gates” for every person operating a farming activity to argue that they are operating at GMP and to seek a consent accordingly. There needs to be a tightly controlled drafting gate.
- 9.6 That is one dimension of the Fonterra submission proposal that I consider needs to be tightened.
- 9.7 Accordingly, I propose that a new policy be added to act as a gateway test for when a consent to exceed the nitrogen baseline should be contemplated. That new policy would read as follows:

4.38BA Within the Red, Orange, Green, Light Blue of Lakes Nutrient Allocation Zones, only consider the granting of an application for a resource consent to exceed the Baseline GMP Loss Rate after 1 June 2020 where:

- (a) the Baseline GMP Loss Rate is less than the Assessed Baseline GMP Loss Rate; and
 - (b) the reason for (a) is because of any of the following factors:
 - i. the limitations of the Farm Portal due to the modelling rules not reflecting actual farming Good Management Practices; or
 - ii. the limitations of the OVERSEER® model to measure nitrogen loss rates from the farm system; and
 - (c) conditions of consent are imposed in accordance with Policies 4.37, 4.38 and 4.38AA; and
 - (d) the Farm Environment Plan demonstrates the adoption of all applicable Good Management Practices.
- provided that any resource consent granted shall:
- (e) not authorise a nitrogen loss rate that exceeds the Assessed Baseline GMP Loss Rate; and
 - (f) only authorise a nitrogen loss rate that exceeds the nitrogen baseline if Policy 4.38A applies.

9.8 A corresponding policy would apply in Part B of PC5⁸.

9.9 Such a policy means:

- (a) that an applicant must demonstrate that there is something peculiar about the farm system that is not anticipated by the Farm Portal or OVERSEER®; and
- (b) the ability to discharge at a rate above the Portal-generated Baseline GMP is not open ended but capped by the concept of the “Assessed Baseline GMP Rate”⁹

⁸ I also propose a similar policy in Part B in relation to the Good Management Practice Loss Rate that for the same reasons allows for the use of the “Assessed Good Management Practice Loss Rate” when the same tests described in Policy 4.38BA apply.

⁹ This is important to capture any farms that have had a system change since the baseline 2009-2013 period and for whom complying with all applicable Good Management Practices will not provide assurance that the policy imperative of limited nitrogen loss to the 2009-2013 rates less the benefits of adopting GMPs will be delivered.

- (c) even when the farming activity will operate above the Portal-generated Baseline GMP the farming activity will be operated using all Good Management Practices (and will be capped as noted by the Assessed Good Management Practice Rate); and
 - (d) the nitrogen baseline will not be exceeded (except in those cases where an exceedance of the baseline lawfully occurred before PC5 was notified).
- 9.10 I fully accept that the alternative pathway should not allow for an increase in nitrogen loss relative to the status quo under the CLWRP (i.e. it must not lead to water quality going backwards from what would have otherwise have occurred). My proposed Policy 4.38BA is designed to ensure that.

The importance of certainty about the conditions of rules

- 9.11 Another important principle that I consider needs to be applied is that there needs to be certainty and clarity about what farming activity, or level of performance, qualifies for each consent category. It is, in my opinion, undesirable for a rule to allow the status of an activity to be (effectively) determined through the consent process. This is most critical for rules that default to prohibited activities. What is a prohibited activity and what is not needs to be clear and objective and not subject to discretion or assessment.
- 9.12 Again, the Fonterra proposal for an alternative pathway may not have adequately addressed that principle. It did suggest that some assessment was required (in terms of the definitions referred to in paragraph 9.1 above) before it could be determined if controlled/restricted discretionary activity or prohibited status applied. Accordingly, in the redline provisions attached as Appendix 1 I have suggested an amended approach. That approach does two things:
- (a) It clearly distinguishes applications complying with Portal GMP rates (being controlled or restricted discretionary activities) and those applications relying on the alternative pathway (which would be full discretionary activities); and

(b) It applies more certain and objective conditions for determining whether an activity complies with the proposed discretionary activity rule (and hence does not fall to be prohibited). Those conditions are that:

- i. A Farm Environment Plan has been prepared by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted by the farming enterprise; and
- ii. The nitrogen loss calculation for the farming activity does not exceed the nitrogen baseline.

9.13 The policy outlined in paragraph 9.7 would then apply to the application and Council would have full discretion to decline the application if it considered that it did not meet the requirements of the policy. Alternatively, it could use the discretion available to impose a nitrogen loss rate (less than the nitrogen baseline) that reflected the “Assessed Baseline GMP Loss Rate”.

9.14 New definition of “Assessed Baseline GMP Loss Rate” and “Assessed Good Management Practice Loss Rate” are proposed similar to that included in the Fonterra submission. However, these are not referred to in the conditions of rules, they are only referred to in the policies and matters of discretion.

9.15 The full planning provisions giving effect to the alternative pathway as set out in Appendix 1 contain a range of other consequential amendments to policies and rules to integrate the proposal into the existing framework of PC5 in a coherent manner.

10 SECTION 42A REPORT AND THE ALTERNATIVE PATHWAY

10.1 The alternative pathway and associated issues is discussed in various parts of the Section 42A Report.

10.2 The following arguments are made in that report:

- (a) An alternative N loss rate determined through the discretionary assessment of a resource consent process is not suitable as an entry condition to a rule (paragraph 6.154).
- (b) An alternative GMP loss rate limit that does not rely on the Portal will undermine CRC's approach to setting limits (para 6.155).
- (c) An alternative GMP loss rate limit that does not rely on the Portal is unnecessary because there is adequate confidence in the efficacy in the Farm Portal (paragraph 6.156).
- (d) The Portal needs to be used to ensure "fair and equitable" GMP loss rate limits (paragraphs 6.92 and 6.113).
- (e) An alternative pathway would not achieve policies of higher order planning instruments, notably Objective A1 of the NPSFM and Policies 5.3.12 and 7.3.7 and 7.3.9 of the CRPS (paragraphs 157-158).
- (f) CRC cannot be confident that individual resource consent applications could be adequately assessed in terms of their cumulative effects and hence there is significant potential for failure to maintain or improve water quality (paragraph 6.160).

10.3 I address each of these concerns in turn.

Entry conditions to a controlled or restricted discretionary rule

10.4 As noted in paragraph 9.12, the proposal I put forward removes the terms "Assessed Baseline GMP Loss Rate" and "Assessed Good Management Practice Loss Rate" from the conditions of rules (although they remain important components of the policy framework that applies to the assessment of applications).

10.5 The key "alternative pathway" rule now relies on clear and certain conditions relating to:

- (a) the need for FEPs to be prepared by Certified Farm Consultants and the need for those consultants to verify that all applicable GMPs are employed; and

(b) the assurance that the nitrogen baseline is not exceeded.

- 10.6 With entry conditions satisfied, other policies requiring compliance with an Assessed Baseline GMP Loss Rate apply.

Undermining limits

- 10.7 In my opinion the alternative pathway will not undermine the CRC's approach to setting limits within the CLWRP. Section 2.5 of the CLWRP very clearly describes what limits are for the purpose of the plan.

- 10.8 Section 2.5 1) c) anticipates that limits can be in the form of rules that:

Control activities by:

...

- (c) *requiring resource consents for activities where the Council has determined that a case-by-case assessment is required to assess whether the objectives and the in-stream fresh water outcomes sought by the Plan will be achieved.*

- 10.9 There is nothing in the background reports I have read that leads me to understand that the water quality limits in Table 15B(c) have been set through strict correlation of what the Farm Portal-determined limits will deliver. In any event, it is the evidence of Mr Cullen that, for dairy, only a small number of farms would need to make use of the alternative pathway.

- 10.10 Indeed the limits in the CLWRP cannot have been set cognisant of the Farm Portal because they predate the Farm Portal. The water quality limits of Part B of PC5 were set using the process summarised in the report *Waitaki Limit Setting Process: Technical Overview*¹⁰. While that process involved modelling different land use scenarios, none of those scenarios involved use of the Portal or the use of an alternative pathway as proposed here.

¹⁰ Environment Canterbury Report No. R15/99, December 2015

- 10.11 Similarly, there is nothing I am aware of that indicates that the Portal has been calibrated to deliver the water quality limits of Schedule 8 or the water quality limits of Table 15B(c). Indeed to take that approach would be contrary to the purpose of the Portal (being to require N loss at rates that reflect good management practice not rates that generate an aggregate N loss that achieves specific water quality objectives).
- 10.12 For those reasons I consider that the suggestion that the alternative pathway would undermine the limit setting has no basis in evidence.

Necessity for the alternative pathway

- 10.13 The necessity for the alternative pathway in terms of the reliability of the Portal is largely a technical matter in respect of which I rely on the evidence of Mr Cullen.

Fair and equitable GMP loss rates

- 10.14 As noted above, the Section 42A Report infers that the Farm Portal provides for “fair and equitable” generation of N loss rates, whereas the alternative pathway would not.
- 10.15 I take the reference to “fair and equitable” to mean that similar farm systems (with similar biophysical constraints) should receive similar loss rate limits. That is, loss rate limits ought not to be influenced by the management practices a farmer elects to use to the extent that such practices may not be “good”. The starting position of a farm (i.e. what sort of farming system is in place) is relevant to the extent that it would be inequitable to impose the same loss rate limit over all farms regardless of the farming land use and system. That would lead to highly variable costs of compliance across a catchment unrelated to the extent of effect being created.
- 10.16 I agree that in that regard the Portal is designed to deliver an equitable outcome – in the sense that it does not impose a uniform rate across all farms with resulting highly variable costs of compliance or which provide windfall gains to some, while rewarding others for past poor practice.

- 10.17 In other words, the Portal already, and deliberately, generates N loss limits that vary according to a whole range of variables (soils, climate, existing farm system type etc). All the alternative pathway proposal does is ensure that that approach is accurately implemented by providing a means of testing whether technical parameters of models effectively and, importantly, accurately represent all those variables. It is not, as is implied by the Section 42A Report, a platform for special pleading.

Consistency with higher order planning instruments

- 10.18 For all the reasons given above, the alternative pathway is not, in my opinion, inconsistent with the policies and objectives of higher order planning documents.
- 10.19 With the inclusion of the alternative pathway PC5 would continue to achieve the requirement to maintain and improve overall water quality in accordance with Objective A1 of the NPSFM. That is because:
- (a) The proposal specifically prohibits exceedance of the nitrogen baseline (except where it was lawful at the time of notification – a limited exception contained in PC5 as notified). This means that water quality could not deteriorate as a result of the proposal.
 - (b) Reductions from the baseline would still occur in accordance with the Portal-generated limits and, for those farming activities that qualify for the alternative pathway, in accordance with an assessed GMP rate. This means that there must be a reduction in nitrogen loss and hence improvement in water quality.
- 10.20 Similarly, in my opinion PC5 gives effect to the CRPS. Policies 7.3.7 and 7.3.9 are not, in my opinion, offended by the alternative pathway.
- 10.21 Policy 7.3.7 states:

Policy 7.3.7 – Water quality and land uses

To avoid, remedy or mitigate adverse effects of changes in

land uses on the quality of fresh water (surface or ground) by:

- (1) identifying catchments where water quality may be adversely affected, either singularly or cumulatively, by increases in the application of nutrients to land or other changes in land use; and*
- (2) controlling changes in land uses to ensure water quality standards are maintained or where water quality is already below the minimum standard for the water body, it is improved to the minimum standard within an appropriate timeframe.*

- 10.22 The alternative pathway does not affect the identification of catchments in accordance with (1). The alternative pathway does control land uses to ensure water quality standards are maintained or improved consistent with (2).
- 10.23 Accordingly, I see no conflict between the alternative pathway and RPS Policy 7.3.7.
- 10.24 Policy 7.3.9 states:

Policy 7.3.9 – Integrated solutions to fresh water management

To require integrated solutions to the management of fresh water by developing and implementing comprehensive management plans which address the policies of this Statement including addressing all the relevant matters set out in Appendix 2.

- 10.25 The terms “integrated solution” and “comprehensive management plan” are not defined by the CRPS.
- 10.26 I understand from reading Appendix 2 of the CRPS that an integrated solution to the management of freshwater is one that¹¹:
- (a) takes a whole catchment approach;
 - (b) takes account of water quality and quality issues and interrelationships;

¹¹ This list is abbreviated from the fuller list provided in Appendix 2 to the CRPS

- (c) takes into account the full suite of values that may be held in water;
- (d) identifies the activities that need to be managed to ensure water quality is maintained;
- (e) provides for restoration and enhancement of degraded water bodies;
- (f) considers opportunities to enhance values as part of water harvest and storage proposals;
- (g) considers possible future uses (irrigation) within the catchment and
- (h) develops a planning response cognisant of all those factors.

10.27 The term “comprehensive management plan” seems intentionally broad to cover a range of possible types of statutory and non-statutory plans at various scales according to the issue at hand. However, it seems clear to me that a management plan encompasses a regional plan.

10.28 The question is whether the inclusion of the alternative pathway in PC5 means that PC5 would not give effect to CRPS Policy 7.3.9? In my opinion, the inclusion of the alternative pathway in PC5 has no effect on the extent to which PC5 gives effect to CRPS Policy 7.3.9.

10.29 The Section 42A Report suggests that the alternative consenting pathway is contrary to the direction for an “integrated solution”. With respect, in my opinion, that implies a definition of “integrated solution” that differs significantly from my understanding as expressed above. An integrated solution does not mean that every activity needs to be treated consistently such that there is just one pathway to the lawful undertaking of an activity. Integration is a much broader concept than that.

- 10.30 Indeed it is commonplace for plans to provide for activities meeting clear and objective thresholds to be directed to a controlled or RDA pathway while those not meeting those thresholds to be subject to a broader assessment against policies that reflect the intent behind those clear and objective thresholds.
- 10.31 It is, in my opinion, a misapplication of the concept of integration, to suggest that it would offend CRPS Policies 7.3.7 and 7.3.9 if some activities were allowed to be authorised without compliance with the Portal-generated limits.

Cumulative effects and the need to meet water quality objectives

- 10.32 The alternative pathway does not risk cumulative effects compromising water quality objectives largely for the reasons set out in para 10.19.
- 10.33 I accept that a very open approach to an alternative pathway, without an effective gateway test, coupled with an absence of upper parameters for N loss (in the form of the nitrogen baseline and the assessed GMP rates) could result in cumulative effects as described in the Section 42A Report. However such a regime is not proposed here and hence I consider the Section 42A Report has very significantly overstated this risk.

CRC's approach of managing the issue through audit and compliance procedures

- 10.34 Also relevant is the discussion from paragraph 6.190 of the Section 42A Report. That discussion explains that CRC accepts that there will be situations where a farm is adopting all Good Management Practices but cannot meet the Portal-generated N loss rates.
- 10.35 It advises that the current approach to that issue is to grant resource consents without a numeric N loss limit as a condition on consent. Rather the numeric limit is required to be included as a target in the FEP.

- 10.36 As I understand it, the advantage of that approach is that it allows CRC to manage situations where *“in the short term a property may exceed its Baseline GMP Loss Rate but without any changes in farming intensity and all the relevant GMPs are in place”*.
- 10.37 It does this by requiring consent holders to achieve an “A” or “B” grade in the FEP audit process¹². The Audit Manual allows a farm to be awarded a “B” grade (avoiding compliance action) when it complies with all Good Management Practices despite falling short of meeting the numeric (Portal-generated) loss rate¹³.
- 10.38 It is not clear to me whether CRC regards this as a means by which situations such as those of concern to Fonterra may be managed. That is, it is not clear whether CRC uses this approach to ensure that the Portal does not create difficult compliance issues resulting from anomalous and unobtainable nitrogen loss limits. Or, whether the approach is used solely to address issues arising from anomalous nitrogen loss calculations (i.e. the way performance against the limit is measured).
- 10.39 However it is instructive that the footnote on page 62 of the Section 42A Report suggests that a B grade will be awarded where:
- GMP Practices are in place; and the discrepancy is either:*
- a. Due to OVERSEER® version change where there has been a past System Change and where the farmer:*
 - i Can demonstrate that the change would not have exceeded the NDA when the system change was made; and*
 - li Where the farmer has proposed actions and timeframes to reduce losses to the NDA:*

¹² Auditing may result in an A, B, C or D grade. I understand that only when a C or D grade is awarded is there further compliance action.

¹³ The Audit Manual does not put it in quite these terms referring instead to the taking of a level of confidence (LOC) approach where grading is related to the likelihood that objectives and associated targets will be met. (Note that N loss rates are specified as a target in Schedule 7 as proposed to be amended by PC5)

- b Not due to a System Change and the farmer is operating at Good Management Practice (e.g. where the discrepancy is due to the limitations of:*
 - i OVERSEER® model in measuring natural variability in farm systems; or*
 - ii The Farm Portal, due to the modelling rules not reflecting actual farming practice*

10.40 This seems to me to acknowledge some of the issues with OVERSEER® and the Portal that are of concern to Fonterra. Importantly, if these issues arise in the context of measuring performance against limits set by the Portal then they must also arise in the context of any application status being determined by limits set by that same Portal.

10.41 The final point I would make on this issue is that if CRC does regard the auditing and compliance approach outlined above as a “solution” to any issues with anomalous/inaccurate Portal-generated GMP limits then I would regard that as an inappropriate response. In particular, I would be concerned if it were the Council's proposal to issue consents to a farming activity, imposing limits generated by the Portal which that farming activity had never and could never meet, but then simply rely on the compliance / audit process to address that discrepancy. In my opinion, if there is the potential for the Portal to result in limits that are inaccurate for technical reasons then the solution to that problem should be in the design of the plan rules and not in the audit and compliance strategy.

10.42 An evaluation of the alternative consenting pathway in accordance with Section 32 of the Act is set out in Appendix 2.

11 THE SINKING LID APPROACH

11.1 The Fonterra submission expressed concern about what it termed the “sinking lid” approach to nitrogen loss rates.

11.2 This relates to the suite of policies and rules (largely matters of discretion) that limit N loss to the GMPLR when that is lower than the Baseline GMP.

- 11.3 This means that if the most recent four years of farming activity generates a GMPLR through the Portal that is less than that generated by the Portal for the farming activity over the period 2009-2013 operating at GMP, then that lesser rate applies as the limit. Over time, as consents are implemented and replaced any decrease in N loss achieved by the applicant below the Baseline GMP is “banked” by the CRC. I understand that this will occur during the course of the consent (as the nitrogen loss is reported to the CRC as part of the FEP) and on replacement of the consent.
- 11.4 The difficulty I have with that approach is that creates no incentive for N loss reduction beyond the Baseline GMP. It seems unlikely to me that, being aware of the sinking lid, few farmers will voluntarily reduce nitrogen loss below the Baseline GMP for fear of losing the ability to return their discharge rate to that previously authorised level. In that regard it may have a perverse outcome.
- 11.5 The apparent benefit of the approach is that it allows for gains from technology and better science to be reflected in lower N loss limits over time. Similarly, if land use changes from an intensive to a less intensive use the sinking lid approach ensures that the new, less intensive, use must operate at GMP rate for that use (rather than the rate for use replaced). The extent of latter benefit is debateable since in all cases farming activities are required to operate using GMPs applicable to their particular farming system.
- 11.6 Overall, I consider that the key planning question is whether the approach is the best way of achieving reductions from the Baseline GMP where such reductions are required. My concern is that it probably is not. The approach tends to rely on serendipity (a change to farming type or farming system that might occur from time to time, motivated by any number of factors, that has a lower N loss) rather than a rational approach to N loss reduction designed to achieve required reductions at least overall cost (preferably through an appropriate sharing of the burden of N loss reduction across the various contributors).

- 11.7 The sinking lid approach runs the risk of reducing “allocation” to individual properties based on factors that are outside of a farmer’s control. Ms Ruston explains in her evidence some of the situations that might arise that could lead to a GMPLR for dairy farms being based on an atypical four-year period. These include short-term reductions in stock due to adverse market conditions, extreme weather events (such as droughts), animal health or biosecurity issues (such as tuberculosis or foot and mouth disease); or personal issues such as poor health of a farmer.
- 11.8 That suggests to me that either:
- (a) the sinking lid should not apply and any further reductions required from the Baseline GMP should be achieved through a subsequent plan changes for specific sub regions that allow the basis for reductions to be transparently assessed; or (as a minimum)
 - (b) the sinking lid should be applied with some flexibility ensuring that the four year average is representative of the land use and farm system and short term fluctuations are discounted.
- 11.9 I note that, with the exception of farm enterprises and some zones in Part B, the concept of the GMPLR is not included as a condition of rules but remains a matter of policy and of discretion. This suggests to me that the Plan does not anticipate an inflexible application of the approach.
- 11.10 Despite that, there appears to be nothing within the policy framework that guides how any discretion is to be applied. In fact the contrary is true. The policies¹⁴ are written inflexibly with no guidance as to how and in what circumstances some departure from the strict application of the GMPLR should be contemplated.

¹⁴ These include Policies 4.37 (b), 4.38 (a) 4.38AA (b). 4.38A (b) in Part A of PC5 and Policies

11.11 In some respects that absence of policy direction is understandable. To test the viability of the second option outlined in paragraph 11.8 I have attempted to draft a policy that might allow for the sinking lid approach to be applied with the sort of flexibility required. I found that to be a difficult task.

11.12 The policy I have drafted reads¹⁵:

4.36A Require that farming activities comply with the Good Management Practice Loss Rate (or where applicable the Assessed Good Management Practice Loss Rate) if that loss rate is lower than the Baseline GMP Loss Rate, except where the reason for the lower loss rate is because of:

(a) a change in the nature of farming operations; or

(b) reduced stocking rates;

which in either case:

(c) have resulted from climatic, biological, market or other events beyond the control of the farm operator; and

(d) are not intended to be permanent.

11.13 While I consider such a policy to be workable, I do acknowledge it would be challenging to implement given the broad opportunity it presents for those reporting their nitrogen calculation to argue that the policy applies and because of the wide scope for debate around matters such as whether a system change was intended to be permanent.

11.14 For that reason, on balance, I consider that the preferred planning approach would be to remove the sinking lid approach entirely.

11.15 For that reason, the provisions I have included in Appendix 1 remove reference those provisions that give rise to the sinking lid approach.

¹⁵ Reference is made in the policy to “the GMPLR or where applicable the Assessed GMPLR” because I propose amendments to the proposed matters of discretion so as to require adherence to the Assessed GMPLR and not the GMPLR where certain tests can be met. That is for all the reasons discussed in section 10 of this evidence

12 POLICY 4.38AB – THE PERMITTED BASELINE

12.1 Policy 4.38 states:

4.38AB *When considering any application for resource consent for the use of land for a farming activity, the consent authority must not disregard any adverse effect of the proposed activity on water quality on the basis that this Plan permits an activity with that effect.*

12.2 This is a highly unusual policy. In fact I am not aware of such a policy existing in any other plan. I understand that it seeks to remove the statutory discretion contained in section 104(2) of the Act (or at least convey to plan users the likely approach of the CRC).

12.3 Section 104(2) states:

When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if the plan permits an activity with that effect.

12.4 Hence the effect of the policy is that all effects of an activity will be considered in each application for the use of land for a farming activity notwithstanding that some of those effects are permitted as of right.

12.5 The concept of the permitted baseline has a complex planning (and legal) history. It was introduced to the Act as an amendment in 2009. Acknowledging that case law had given rise to the concept but that there are situations when recognition of the baseline is appropriate and situations where it is not, the law-makers did not express a firm view on whether the permitted baseline should apply or not. It was left as a matter of discretion for councils to determine on a case-by-case basis.

- 12.6 In planning terms in deciding whether to apply the permitted baseline (and disregard some potential adverse effects) it is necessary to consider the likelihood of those effects occurring in the absence of the application proceeding. In some cases it is very clear that if the application is declined the applicant will in all likelihood develop to the extent of the permitted baseline anyway and hence declining an application on the basis of those permitted effects makes little sense.
- 12.7 On the other hand, it is sometimes equally clear that although some effects would be permitted in the absence of the application being successful those effects are highly unlikely to result and hence the valid comparison in considering the acceptability of the application is not the permitted baseline but the existing environment.
- 12.8 Another valid consideration in deciding whether to have regard to the permitted baseline is the nature of the conditions placed on the permitted activity and whether those conditions would adequately address the adverse effects.
- 12.9 In my opinion both these matters are relevant to the assessment of land use consent applications for farming activities. There are a number of permitted activities associated with farming activities. These include activities such as offal pits, burying of dead animals, and on site refuse disposal and associated discharges (permitted under Rules 5.24, 5.25 and 5.27 of the CLWRP).
- 12.10 As I would read Policy 4.38AB the effects of those activities need to be considered notwithstanding that the rules contain conditions that manage the effects of those activities to acceptable levels.
- 12.11 I note from the Section 42A Report (para10.43) that one of the concerns may be the desire to have regard to the effects of an increase of 50 hectares of irrigation or a 20 hectare increase in winter grazing when considering an application for a farming activity.

- 12.12 While I understand that sentiment, any such application is tightly bound in terms of N Loss Rates (even under the alternative pathway I support). In that sense an argument from an applicant to disregard new irrigation and winter grazing will not assist the case if the N loss rates cannot be met.
- 12.13 For all those reasons I support Fonterra's submission to delete Policy 4.38AB. It is unnecessary as the CRC can, in any case, disregard the permitted baseline in appropriate cases without this policy.

13 WAITAKI CATCHMENT ISSUES

Compliance with load limits (Policy 15B.4.25 – Valley and Tributaries Freshwater Management Unit)

- 13.1 Policy 15B.4.25(c) describes the nature of conditions that are to be placed on consents for farming activities in the Valley and Tributaries Freshwater Management Unit.
- 13.2 Fonterra submitted in opposition to this policy partly due to the alternative pathway and sinking lid issues previously discussed. However, the other reason for Fonterra's request to amend the policy was that there was a lack of clarity about how the "agricultural load limit as calculated in accordance with Schedule 27" was intended to apply.
- 13.3 As notified Policy 15B.4.25 reads:

15B.4.25 Freshwater quality is maintained within the Valley and Tributaries Freshwater Management Unit by:

(a) avoiding increases in nitrogen loss from farming activities that would cause the Valley and Tributaries agricultural nitrogen load limit calculated in accordance with Schedule 27 to be exceeded; and

(b) only granting a resource consent for a farming activity to exceed the nitrogen baseline where the application demonstrates that the local in-stream and groundwater quality limits in Table 15B(c) and 15B(e) will not be exceeded; and

(c) including on any resource consent granted for the use of land for a farming activity, conditions that require farming activities to operate at or below the Good Management Practice Loss Rate, in any circumstances where that Good Management Practice Loss Rate is less than either the Baseline GMP Loss Rate or the agricultural nitrogen load as calculated in accordance with Schedule 27

- 13.4 The part of the policy of concern to Fonterra is that part of (c) which suggests that the Portal-generated GMPLR is directly comparable to the agricultural nitrogen load calculated in accordance with Schedule 27. Fonterra's concern is that the GMPLR is a rate of nitrogen loss in kilograms per hectare per year, whereas the agricultural nitrogen load calculated in accordance with Schedule 27 is a tonnage of N per year (that is an aggregate annualisation of the loss rate). Hence it is unclear how an applicant could demonstrate that the Good Management Practice Loss Rate was, or was not, less than the agricultural nitrogen load calculated in accordance with Schedule 27.

- 13.5 With regard to this matter the Section 42A Report states:

I agree with Fonterra that it is unclear how the GMP Loss Rate will be compared with Schedule 27. I consider it appropriate that when a resource consent application is lodged under Rule 15B.5.35 it is subject to two separate assessments; one that ensures the loss rate complies with the relevant load limit calculated in Schedule 27 and another that ensures the proposed nitrogen loss limit assigned to the consent is consistent with GMP.

- 13.6 I agree with that statement and the solution suggested in that statement. I do not however agree with the wording proposed for the policy itself or for the associated matter of discretion in Rule 15B.5.35.

- 13.7 In both instances the officer's proposal is to remove reference to "agricultural load limit" and refer instead to the "maximum amount of nitrogen that can be leached from the farming activity". So that, for example, Policy 15.B.4.25 (c) would read:

(c) including, on any resource consent granted for the use of land for a farming activity, conditions that,

i. specify the maximum amount of nitrogen that can be leached

from the property which does not result in the nitrogen load limit calculated in accordance with Schedule 27 to be exceeded; and

ii. require farming activities to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than ~~the maximum amount of nitrogen that can be leached from the property either the Baseline GMP Loss Rate or the agricultural nitrogen load limit as calculated in accordance with Schedule 27.~~

13.8 Setting aside for the moment the issues discussed earlier regarding reliance on Portal-generated limits and the sinking lid, the difficulty I have with the proposed wording is that it remains unclear what the “maximum amount of nitrogen that can be leached from the farming activity” is. In my opinion, that needs to be linked back to the need for the activity to operate within the load limit.

13.9 Accordingly, I propose the following wording:

(c) including on any resource consent granted for the use of land for a farming activity, conditions that require farming activities to operate at or below:

(i) the nitrogen loss rate that ensures that the Valley and Tributaries nitrogen load limit as calculated in accordance with Schedule 27 is not exceeded; and

(ii) where Policy 15B.4.13A applies, the Assessed Good Management Practice Loss Rate, in any circumstance where that Assessed Good Management Practice Loss Rate is less than ~~either the Assessed Baseline GMP Loss Rate the agricultural nitrogen load limit as calculated in accordance with Schedule 27.~~ if that rate is less than the rate required in accordance with part (c) (i) of this policy.

13.10 Similar amendment is, in my opinion, required to Matter of Discretion 5 of Rule 15B.5.35.

Surface water takes – Whitneys Creek (Policy 15B.4.4)

13.11 Policy 15B.4.4 reads:

Surface water flows are maintained in Whitneys Creek by avoiding the transfer of any part of a surface water take from Whitneys Creek and avoiding future allocation of surface water upstream of map reference CB19: 5410-2531.

- 13.12 Fonterra sought that a qualification be added so that transfers only be “avoided where that transfer would result in an increase in the take from Whitneys Creek”. It also sought that the avoidance of allocation above the referenced point be limited to “additional” allocation (i.e. any allocation beyond existing levels).
- 13.13 The Section 42A Report incorrectly refers to the amendment sought by Fonterra. Fonterra did not seek the addition of the qualification “where that transfer will result in a net decrease in surface water flows”.
- 13.14 In any event, the Section 42A Report recommends no substantive change to Policy 15B.4.4 although I was unable to locate any analysis of why the Fonterra submission is recommended for rejection.
- 13.15 I understand that the reference point CB19: 5410-2531 is the location of the sole authorised take from Whitneys Creek; that the allocation is set at the current consented take (35 l/s); and that the minimum flow is set at 45 l/s. This is on the basis that there is insufficient flow recording data to allow limits to be set as a proportion of MALF in accordance with Rule 5.123. These conservative limits have been set to protect the habitat of mudfish in the reaches of Whitneys Creek above CB19: 5410-2531.
- 13.16 I am not aware of any evidence that suggests that that regime is not appropriate.
- 13.17 The Fonterra submission was motivated by a desire to ensure that the transfer of water permits is not unnecessarily restricted (and indeed facilitated as much as possible in accordance with NPSFM Policies B2 and B3) and that, unless sound reasons exist, flow regimes are not set such that the replacement of expiring water take consents are not possible.

13.18 I am satisfied that the principles of concern to Fonterra (with which I concur) are not unreasonably compromised by Policy 15B.4.4. However, I do consider that the intent of the policy could be more clearly communicated by some minor amendment.

13.19 The amendment I proposed is as follows:

Surface water flows are maintained in Whitneys Creek by avoiding:

(a) the transfer of any part of a surface water take from ~~that point at or below map reference CB19: 5410-2531 to any point on Whitneys Creek above that map reference;~~ and

(b) ~~avoiding~~ future allocation of surface water upstream of map reference CB19: 5410-2531.

Adaptive Management Conditions (Policy 15B.4.20 (d))

13.20 Policy 15B.4.20(d) refers to:

Applying to any resource consent for the use of land for a farming activity, or any permit granted for a discharge associated with an aquaculture operation or community wastewater activity, adaptive management conditions in accordance with the water quality limits set out in Tables 15B(c), 15B(d) and 15B(e).

13.21 Fonterra submitted that the term “adaptive management conditions” was already used in the CLWRP and was defined in a very specific way within both Changes 1 and 2. In those definitions “adaptive management conditions” relate solely to conditions on groundwater takes. Both definitions read:

means a condition or conditions on a resource consent to take groundwater that includes an annually variable volume dependent on the annually assessed state of the groundwater resource in a zone.

13.22 Although those definitions apply only within the Selwyn-Waihora and Hinds sub regions, Fonterra submitted that the use of the term in the Waitaki sub region to mean something different was confusing.

13.23 The Section 42A Report usefully sets out that the context for the term “adaptive management conditions” is the upper Waitaki consenting process where the term has a particular meaning relating to conditions requiring consent holders to undertake actions to mitigate effects when certain trigger levels (water quality concentration thresholds) are exceeded.

13.24 Noting a range of issues raised by other submitters the Section 42A Report notes:

In addition to the submissions above, Fonterra seeks amendments to clarify how ‘adaptive management’ conditions are to apply to land use consents or request that a definition of ‘adaptive management’ is included in PC5. The term ‘adaptive management’ can be subject to different interpretations and while the intention of the Policy 15B.4.20(d) relates to ‘adaptive management’ in the context outlined in paragraph 22.161 being monitoring and response conditions. I consider the term could still be open to interpretation. Therefore, I support Fonterra’s submission in part and consider alternative wording that refers to ‘monitoring and response’ conditions rather than ‘adaptive management conditions’ could clarify the intention of the policy.

13.25 Despite that apparent support, the amended version of Policy 15B.4.20 proposed by the Section 42A Report continues to refer to “adaptive management conditions”.

13.26 I do not offer an opinion on the changes proposed to Policy 15B.4.20 relating to other submitters’ concerns, however, I do consider that an alternative phrase should be used in the Policy. The alternative (but in my opinion less desirable) approach would be to define adaptive management conditions to be something different in the Waitaki sub region to that applying in the Selwyn-Waihora and Hinds sub regions.

APPENDIX 1 – REDLINE PROVISIONS

Text in **blue** font is that proposed in the Section 42A Report

Text in **red** font is that proposed by Gerard Willis on behalf of Fonterra.

Note, the following is not a complete list of PC5 provisions. Those provisions I do not propose to be amended are not reproduced here.

Proposed amendments to Part A

Definitions

Add the follow two new definitions:

<u>Assessed Baseline GMP Loss Rate</u>	<u>means the average nitrogen loss rate below the root zone, as estimated by OVERSEER® (where the required 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, for the farming activity carried out over the period, 01 January 2009 –31 December 2013 if operated using all applicable Good Management Practices.</u>
<u>Assessed Good Management Practice Loss Rate</u>	<u>means the average nitrogen loss rate below the root zone, as estimated by OVERSEER®, (where the required 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 for the farming activity carried out over the most recent four year period, if operated using all applicable Good Management Practices.</u>

Policies

4.36 ~~Sustainable farming practices are promoted in all areas by:~~ Water quality outcomes are met by:

- (a) ~~enabling very small farming operations or farms with minimal nutrient discharges to be undertaken without requiring the record-keeping of modelled nutrient loss; all farming activities~~ minimising nutrient losses through the implementation of good practice;

- (b) ~~recognising that there may be limited increases in the loss of nutrients from farming activities in areas where regional water quality outcomes are at risk of not being met, that are shown by an Orange colouring on the Series A Planning Maps, provided that regional water quality outcomes will still be met; and all permitted farming activities on properties greater than 10 hectares preparing and implementing a Management Plan in accordance with Schedule 7A;~~
- (bb) farming activities with the potential for ~~more~~ significant nutrient losses, managing their nitrogen loss in accordance with the Good Management Practices ~~Loss Rates~~ and being subject to a resource consent process; and
- (c) encouraging industry and irrigation scheme-based initiatives to improve land and water use practices for farming activities, reduce nutrient loss and nutrient discharges, and facilitate land use consenting, including irrigation scheme-wide initiatives, reporting and auditing of their constituent farms.

4.37 ~~Prevent any increase in the loss of nutrients from farming activities in areas where region-wide water quality outcomes are not being met, that are shown by a Red colouring on the Series A Planning Maps and in Lake Zones as shown on the Series A Planning Maps. Freshwater quality is improved within the Lake Zone and Red Nutrient Allocation Zone by:~~

- (a) avoiding the granting of any resource consent that will allow the nitrogen losses from a farming activity to exceed the Baseline GMP Loss Rate, except where Policy 4.38A or Policy 4.38BA applies; and;
- (b) including on any resource consent granted for the use of land for a farming activity, conditions that:
 - ~~(i)~~ limit the nitrogen loss ~~calculation~~ for the farming activity to a rate not exceeding the Baseline GMP Loss Rate or where Policy 4.38BA applies, the Assessed Baseline GMP Loss Rate; and
 - ~~(ii)~~ require farming activities to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and
- (c) requiring a Farm Environment Plan as part of any application for resource consent to use land for a farming activity, and requiring that Farm Environment Plan to:

- (i) describe the specific on-farm actions that will be undertaken (and the timeframe within which these actions will be undertaken) to implement the Good Management Practices; and
- (ii) provide an explanation of how these on-farm actions will ensure progress towards the attainment of the management objectives and targets in Schedule 7 of this plan.

4.38

~~Require the adoption of the best practicable options to minimise the loss of nutrients from farming activities in areas where region-wide water quality outcomes are at risk of not being met, that are shown by an Orange colouring on the Series A Planning Map. Freshwater quality is maintained within the Orange Nutrient Allocation Zone by:~~

- (a) restricting nitrogen losses from farming activities to the lesser of the Baseline GMP Loss Rate or the Good Management Practice Loss Rate, except where Policy 4.38A or Policy 4.38BA applies; and
- (b) including on any resource consent granted for the use of land for a farming activity, conditions that:
 - ~~(i) limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate or where Policy 4.38BA applies, the Assessed Baseline GMP Loss Rate; and~~
 - ~~(ii) require farming activities to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
- c requiring a Farm Environment Plan as part of any application for resource consent to use land for a farming activity, and requiring that Farm Environment Plan to:
 - (i) describe the specific on-farm actions that will be undertaken (and the timeframe within which these actions will be undertaken) to implement the Good Management Practices; and
 - (ii) provide an explanation of how these on-farm actions will ensure progress towards the attainment of the management objectives and targets in Schedule 7 of this plan.

4.38AA Freshwater quality is maintained within the Green and Light Blue Nutrient Allocation Zones by:

- (a) restricting increases in nitrogen loss from farming activities to no more than a total of 5kg/ha/yr above the Baseline GMP Loss Rate; and
- (b) including on any resource consent granted for the use of land for a farming activity, conditions that:
 - (i) limit the nitrogen loss ~~calculation~~ for the farming activity to a rate not exceeding a total of 5kg/ha/yr above ~~either~~, the Baseline GMP Loss Rate, ~~or where Policy 4.38BA applies, the Assessed Baseline GMP Loss Rate~~; and
 - ~~(ii) require farming activities to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than 5kg/ha/yr above the Baseline GMP Loss Rate; and~~
- (c) not granting any resource consent to exceed the Baseline GMP Loss Rate ~~or where Policy 4.38BA applies, the Assessed Baseline GMP Loss Rate~~ unless the application for resource consent demonstrates that water quality will be maintained; and
- (d) requiring a Farm Environment Plan as part of any application for resource consent to use land for a farming activity, and requiring that Farm Environment Plan to:
 - (i) describe the specific on-farm actions that will be undertaken (and the timeframe within which these actions will be undertaken), to implement the Good Management Practices; and
 - (i) provide an explanation of how these on-farm actions will ensure progress towards the attainment of the management objectives and targets in Schedule 7 of this Plan.

~~**4.38AB** When considering any application for resource consent for the use of land for a farming activity, the consent authority must not disregard any adverse effect of the proposed activity on water quality on the basis that this Plan permits an activity with that effect.~~

4.38A 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.~~

~~4.38BA Within the Red, Orange, Green, Light Blue of Lakes Nutrient Allocation Zones, only consider the granting of an application for a resource consent to exceed the Baseline GMP Loss Rate after 1 June 2020 where:~~

~~(a) the Baseline GMP Loss Rate is less than the Assessed Baseline GMP Loss Rate; and~~

~~(b) the reason for (a) is because of any of the following factors:~~

~~i. the limitations of the Farm Portal due to the modelling rules not reflecting actual farming Good Management Practices; or~~

~~ii. the limitations of the OVERSEER® model to measure nitrogen loss rates from the farm system; and~~

~~(c) conditions of consent are imposed in accordance with Policies 4.37, 4.38 and 4.38AA; and~~

~~(d) the Farm Environment Plan demonstrates the adoption of all applicable Good Management Practices,~~

~~provided that any resource consent granted shall:~~

~~(e) not authorise a nitrogen loss rate that exceeds the Assessed Baseline GMP Loss Rate; and~~

~~(f) only authorise a nitrogen loss rate that exceeds the nitrogen baseline if Policy 4.38A applies.~~

4.41A The contribution that the preparation of accurate nutrient budgets and Farm Environment Plans make to the attainment of the water quality outcomes is recognised by:

- (a) requiring the preparation of nutrient budgets in accordance with the OVERSEER® Best Practice Input Standards; and
- (b) applying to any nutrient budget that forms part of an application for resource consent a level of scrutiny that is proportional to the qualifications, experience and performance of the person who prepared the budget; and
- (c) providing a controlled activity consent pathway for resource consent applications that have been prepared or reviewed by an Accredited Farm Consultant; and
- (d) providing a discretionary activity consent pathway for resource consent applications to exceed the Baseline GMP Loss Rate only if this is done in accordance with Policy 4.38BA.

4.41C 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 ~~G~~good ~~M~~management ~~P~~practices on any land that will be supplied with water from the scheme or principal water supplier; and
- (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 limits specified in Policy 4.37 and 4.38 the Baseline GMP Loss Rate~~ for any land within the Red, Lake or Orange Nutrient Allocation Zones; and
 - (ii) ~~the limits specified in Policy 4.38AA a total of 5kg/ha/yr above the Baseline GMP loss rate~~ for any land within the Green or Light Blue Allocation Zones.

Region-wide rules

Red zone

5.44B Within the Red Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 5.44A is a controlled activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Red Nutrient Allocation Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
5. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
8. Reporting of estimated nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.45A Within the Red Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 or 3 of Rule 5.44B is a restricted discretionary activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Red Nutrient Allocation Zone does not exceed the nitrogen baseline, and from 1 July 2020 does not exceed the Baseline GMP Loss Rate; unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The actual or potential adverse effects of the activity on surface and groundwater quality and sources of drinking water [and how these will be avoided or mitigated](#); and
4. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
5. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
- ~~6. Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
7. Methods to address any non-compliances identified as a result of a Farm Environment Plan audit; including the timing of subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and

9. The consistency of the proposal with Policy 4.38A; and
10. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.46AA Within the Red Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 of Rule 5.45A is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant and contain a statement from that person that all applicable Good Management Practices have been adopted on the property.
3. The nitrogen loss calculation for that part of the property within the Red Nutrient Allocation Zone does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016.

5.46A Within the Red Nutrient Allocation Zone, the use of land for a farming activity as part of a farming enterprise is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the farming enterprise in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the farming enterprise does not exceed the nitrogen baseline; and
3. and, from 1 July 2020 the nitrogen loss calculation for the farming enterprise:
 - i. does not exceed the Good Management Practice Loss Rate; and/or
 - ii. does exceed the Good Management Practice Loss Rate but:
 - A. the Farm Environment Plan submitted in accordance with condition 1 has been prepared by an Accredited Farm Consultant and contains a

statement from that person that all applicable Good Management Practices have been adopted by the farming enterprise; and

- B. it does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016; and

34. The properties comprising the farming enterprise are in the same surface water catchment and Nutrient Allocation Zone, as shown on the Planning Maps.

5.47A Within the Red Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 1 of Rule 5.44B, or condition 1 of Rule 5.45A, or condition 1 of Rule 5.46AA or the use of land for a farming activity as part of a farming enterprise that does not comply with conditions 1 or ~~3-4~~ of Rule 5.46A, is a non-complying activity.

5.48A Within the Red Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 or 3 of Rule ~~5.45A~~5.46AA, or the use of land for a farming activity as part of a farming enterprise that does not comply with condition 2 or 3 of Rule 5.46A is a prohibited activity.

Lakes zone

5.50A Within the Lake Zone, the use of land for a farming activity on a property greater than 10 hectares in area is a restricted discretionary activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Lake Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and

3. The actual or potential adverse effects of the activity on surface and groundwater quality and sources of drinking water and how these will be avoided or mitigated; and
4. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
5. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
6. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.51 ~~The use of land for a farming activity that does not comply with condition 3 of Rule 5.49 or condition 3 of Rule 5.50 is a non-complying activity.~~

5.51 Within the Lakes Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 of Rule 5.50A is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted on the property.
3. The nitrogen loss calculation for that part of the property within the Red Nutrient Allocation Zone does not exceed the

nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

5.51A **Within the Lake Zone, the use of land for a farming activity on a property greater than 10 hectares that does not comply with condition 1 of Rule 5.50A is non-complying activity.**

5.52A **Within the Lake Zone, the use of land for a farming activity on a property greater than 10 hectares that does not comply with condition 2 or 3 of Rule ~~5.50A~~ 5.51 is a prohibited activity.**

Orange zone

5.54B **Within the Orange Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 5.54A is a controlled activity provided the following conditions are met:**

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Orange Nutrient Allocation Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and

5. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits;
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.55A

Within the Orange Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area, that does not comply with condition 2 or 3 of Rule 5.54B, is a restricted discretionary activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Orange Nutrient Allocation Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate, unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The actual or potential adverse effects of the proposal on surface and groundwater quality and sources of drinking water [and how these will be avoided or mitigated](#); and

4. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
5. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
6. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
7. Methods to address any non-compliances that are identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. The consistency of the proposal with Policy 4.38A; and
10. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.55AA Within the Orange Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 of Rule 5.55A is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted on the property.
3. The nitrogen loss calculation for that part of the property within the Red Nutrient Allocation Zone does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

5.56AA **Within the Orange Nutrient Allocation Zone, the use of land for a farming activity as part of a farming enterprise is a discretionary activity, provided the following conditions are met:**

1. A Farm Environment Plan has been prepared for the farming enterprise in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020 the nitrogen loss calculation for the farming enterprise does not exceed the nitrogen baseline;
3. ~~and, from~~ From 1 July 2020 the nitrogen loss calculation for the farming enterprise:
 - i. ~~does not exceed~~ the Good Management Practice Loss Rate; and/or
 - ii. ~~does exceed the Good Management Practice Loss Rate but:~~
 - A. ~~the Farm Environment Plan submitted in accordance with condition 1 has been prepared by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted by the farming enterprise; and~~
 - B. ~~it does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016; and~~
34. The properties comprising the farming enterprise are in the same surface water catchment and Nutrient Allocation Zone, as shown on the Planning Maps.

5.56AB **Within the Orange Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 1 of Rule 5.54B, or ~~one or more of the conditions 1~~ of Rule 5.55A, or ~~one or more of the conditions of Rule 5.55AA~~ or the use of land for a farming activity as part of a farming enterprise that does not comply with one or more of the conditions of Rule 5.56AA is a non-complying activity.**

Green and Light Blue Nutrient Allocation Zones

5.57C **Within the Green or Light Blue Nutrient Allocation Zone the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of**

Rule 5.57B is a controlled activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Green or Light Blue Nutrient Allocation Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
5. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and

9. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.58A **Within the Green or Light Blue Nutrient Allocation Zone the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 or 3 of Rule 5.57C is a restricted discretionary activity provided the following conditions are met:**

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Green or Light Blue Nutrient Allocation Zone does not exceed a total of 5kg/ha/yr above the nitrogen baseline, and from 1 July 2020 a total of 5kg/ha/yr above the Baseline GMP Loss Rate; unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The actual or potential adverse effects of the proposal on surface and groundwater quality and sources of drinking water [and how these will be avoided or mitigated](#); and
4. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
5. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding a total of 5kg/ha/yr above the Baseline GMP Loss Rate; and
6. ~~Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~

7. Methods to address any non-compliances that are identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. The consistency of the proposal with Policy 4.38A; and
10. Methods to prevent an exceedance of any relevant nutrient load limit set out in Sections 6 to 15 of the Plan.

5.58AA Within the Green or Light Blue Nutrient Allocation Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 of Rule 5.58A is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant and contain a statement from that person that all applicable Good Management Practices have been adopted on the property.
3. The nitrogen loss calculation for that part of the property within the Red Nutrient Allocation Zone does not exceed a total of 5kgs/ha/yr above the nitrogen baseline unless the nitrogen baseline was lawfully exceeded by more than 5kgs/ha/year prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

5.58B Within the Green or Light Blue Nutrient Allocation Zone the use of land for a farming activity as part of a farming enterprise is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the farming enterprise does not exceed a total of 5kgs/ha/yr above the nitrogen baseline;

3. ~~and, f~~From 1 July 2020 the nitrogen loss calculation for the farming enterprise:

i. ~~does not exceed~~ the Good Management Practice Loss Rate; ~~and/or~~

ii. ~~does exceed the Good Management Practice Loss Rate but:~~

A. ~~the Farm Environment Plan submitted in accordance with condition 1 has been prepared by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted by the farming enterprise; and~~

B. ~~it does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016; and~~

34. ~~The properties comprising the farming enterprise are in the same surface water catchment and Nutrient Allocation Zone, as shown on the Planning Maps.~~

5.59 ~~The use of land for a farming activity that does not comply with Rule 5.58 is a non-complying activity.~~

5.59A ~~Within the Green or Light Blue Nutrient Allocation Zone the use of land for a farming activity on a property greater than 10 hectares in area, that does not comply with condition 1 of Rule 5.57C, or ~~one or more of the~~ conditions 1 of Rule 5.58A, ~~or conditions one or more of the conditions of Rule 5.58AA, or~~ the use of land for a farming activity as part of a farming enterprise that does not comply with one or more of the conditions of Rule 5.58B, is a non-complying activity.~~

Proposed amendments to Part B

Waitaki Sub-Region

15B.4.10 Water Quality outcomes in the Waitaki Sub-region are achieved by:

- (a) all farming activities minimising nutrient losses through implementation of good practice; and
- (b) all permitted farming activities on properties greater than 10 hectares preparing and implementing a Management Plan in accordance with Schedule 7A; and
- (c) farming activities with the potential for ~~more~~ significant nutrient losses being subject to a resource consent process which will be subject to conditions that ensure compliance with the water quality limits in Tables 15B(c), 15B(d) and 15(e).

Consenting Considerations

15B.4.13 Within the Waitaki Sub-region, consider granting applications 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 at or below the ~~lesser of the Good Management Practice Loss Rate or, the nitrogen loss that occurred in the four years prior to 13 February 2016.~~ nitrogen loss rate consistent with that required by Policies 15B.4.14 to 15B.4.27.

15B.4.14 Within the Hakataramea Freshwater Management Unit, the Northern Fan Freshwater Management Unit and the Valley and Tributaries Freshwater Management Unit, consider granting applications for resource consent to exceed the nitrogen baseline where:

- (a) the land is subject to a water permit granted between 1 November 2009 and 31 August 2010 and that permit authorises the use of water for irrigation; and
- (b) the nitrogen losses from the farming activity remain below the Good Management Practice Loss Rate, or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate

for the farming activity proposed at the time the water permit was granted.

15B.4.15 Within the Hakataramea Flat Zone or Greater Waikāhahi Zone, consider granting applications for resource consent to exceed the nitrogen baseline where:

- (a) the application contains evidence that demonstrates that the nitrogen baseline has been lawfully exceeded and the ~~increased portion of exceeded~~ nitrogen loss is the result of irrigation or winter grazing that has been undertaken as a permitted activity; and
- (b) the farming activity will be managed so that the nitrogen loss calculation remains below the Good Management Practice Loss Rate or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate.

15B.4.15A Within the Waitaki Sub-Region, only consider the granting of an application for a resource consent to exceed the Baseline GMP Loss Rate after 1 June 2020 where:

- (a) the Farm Portal generates a Baseline GMP Loss Rate that is less than the Assessed Baseline GMP Loss Rate; and
- (b) the reason for (a) is because of any of the following factors:
 - i. the limitations of the Farm Portal due to the modelling rules not reflecting actual farming Good Management Practices; or
 - ii. the limitations of the OVERSEER® model to measure nitrogen loss rates from the farm system; and
- (c) conditions of consent are imposed on resource consents in accordance with Policies 15B.4.20, 15B.4.24, 15B.4. 25 and 15B.4.27;
- (d) the Farm Environment Plan demonstrates the adoption of all applicable Good Management Practices; and

provided that any resource consent shall:

- (e) not authorise a nitrogen loss rate that exceeds the Assessed Baseline GMP or the nitrogen baseline except in accordance with Policies 15B.4.13, 15B.4.14 or 15B.4.15.

15B.4.x Within the Waitaki Sub-region only consider the granting of an application for a resource consent to exceed the Good Management Practice Loss Rate where:

- (a) the Good Management Practice Loss Rate is less than the Assessed Baseline GMP Loss Rate; and
- (b) the reason for (a) is because of any of the following factors:
 - i. the limitations of the Farm Portal due to the modelling rules not reflecting actual farming Good Management Practices; or
 - ii. the limitations of the OVERSEER® model to measure nitrogen loss rates from the farm system; and
- (c) conditions of consent are imposed on resource consents in accordance with Policies 15B.4.20, 15B.4.24, 15B.4. 25 and 15B.4.27;
- (d) the Farm Environment Plan demonstrates the adoption of all applicable Good Management Practices,
provided that any resource consent granted shall:
- (e) not authorise a nitrogen loss rate that exceeds the Assessed Good Management Practice Loss Rate or the nitrogen baseline unless Policy 15B.4.13, 15B.4.14 or 15B.4.15 apply.

Irrigation Schemes

15B.4.18 Within the Waitaki Sub-region, water quality is maintained 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 by the scheme or principal water supplier; and
- (b) any discharge permit for the discharge of nutrients granted to an irrigation scheme or principal water supplier to be subject to conditions that restrict the total nitrogen loss from properties that are partially or fully supplied with water from a scheme to a limit not exceeding:

- (i) the Upper Waitaki Nitrogen Headroom applicable to those properties supplied with water from the scheme and that are located in the Haldon Zone or Mid-Catchment Zone;
- (ii) the nitrogen load limit specified in Table 15B(f) and the local in-stream and groundwater quality limits set out in Tables 15B(c) and 15B(e) for the Valley and Tributaries Zone or Whitneys Creek Zone;
- (iii) 90% of the Good Management Practice Loss Rate ~~or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate~~ for the part of the property within the Greater Waikāhahi Zone that is irrigated or used for winter grazing;
- (iv) 90% of the Good Management Practice Loss Rate ~~or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate~~ for the part of the property within the Hakataramea River Zone that is irrigated or used for winter grazing;
- (v) the Baseline GMP Loss Rate for any area not specified above.

Upper Waitaki Freshwater Management Unit

15B.4.20 Freshwater quality is maintained in the Upper Waitaki Freshwater Management Unit by:

- (a) restricting increases in nitrogen losses from farming activities in the Haldon Zone or Mid Catchment Zone ~~to areas of non-irrigated land and~~ a limit not exceeding the Upper Waitaki Nitrogen Headroom; and
- (b) avoiding the granting of any resource consent that will allow nitrogen losses from farming activities in the Ahuriri Zone or Upper Waitaki Hill Zone to exceed the Baseline GMP Loss Rate, except where Policy 15B.4.13 ~~or Policy 15B.4.15A~~ applies; and
- (c) including, on any resource consent granted for the use of land for a farming activity, conditions that require farming activities to operate at or below the ~~Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than either the Baseline GMP Loss Rate or the Upper Waitaki Nitrogen Headroom Limit where~~

that Upper Waitaki Nitrogen Headroom Limit is less than the Baseline GMP Loss Rate; and

- (d) applying to any resource consent granted for the use of land for a farming activity, or any permit granted for a discharge associated with an aquaculture operation or community wastewater activity, adaptive management conditions which accords with the water quality limits set out in Tables 15B(c), 15B(d) and 15B(e) and relates specifically to the effects caused by the activity.

15B.4.21 Maintain water quality in the Upper Waitaki Freshwater Management Unit by restricting the sharing of nitrogen losses between properties and requiring that:

- (a) the property is part of a Nutrient User Group; and
- (b) all of the properties forming the Nutrient User Group are located within the Ahuriri Zone, and, the combined nitrogen loss calculation from those properties does not exceed either their combined Baseline GMP Loss Rate, or where Policy 15B.4.15A applies, their combined Assessed Baseline GMP Loss Rate; or
- (c) all of the properties forming the Nutrient User Group are located within the Mid Catchment or Haldon Zone, and the combined nitrogen loss calculation from those properties does not exceed the sum of the Upper Waitaki Nitrogen Headroom associated with those properties; or
- (d) where properties are located within the Haldon Zone or Lake Zone:
 - (i) the sharing of nitrogen only occurs from the Lake Zone to the Haldon Zone, or occurs entirely within either zone; and
 - (ii) the nitrogen loss calculation does not exceed the aggregated consented nitrogen loss rate of all the properties forming the Nutrient User Group; and
 - (iii) the amount of nitrogen shared by properties within the Lake Zone is not more than the Upper Waitaki Headroom associated with the area of the property within the Lake Zone.
- (e) properties forming the NUG are not members of an irrigation Scheme or part of a farming enterprise

Hakataramea Freshwater Management Unit

15B.4.24 Freshwater quality is maintained within the Hakataramea Freshwater Management Unit by:

- (a) avoiding the granting of any resource consent that will allow nitrogen losses from farming activities in the Hakataramea Freshwater Management Unit to exceed the Baseline GMP Loss Rate, except where Policy 15B.4.13 ~~and~~ 15B.4.15 or 15B.4.15A apply; and
- (b) restricting, in the Hakataramea River Zone, nitrogen losses for the portion of the property irrigated or used for winter grazing to 90% or less of the Good Management Practice-Loss Rate ~~or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate~~.
- ~~(c) requiring, in the Hakataramea Hill Zone and the Hakataramea Flat Zone, farming activities to operate at the the Good Management Practice Loss Rate, where that loss rate is less than the Baseline GMP Loss rate;~~

Valley and Tributaries Freshwater Management Unit

15B.4.25 Freshwater quality is maintained within the Valley and Tributaries Freshwater Management Unit by:

- (a) avoiding increases in nitrogen loss from farming activities that would cause the Valley and Tributaries ~~agricultural~~ nitrogen load limit calculated in accordance with Schedule 27 to be exceeded; and
- (b) only granting a resource consent for a farming activity to exceed the nitrogen baseline where the application demonstrates that the local in-stream and groundwater quality limits in Table 15B(c) and 15B(e) will not be exceeded; and
- (c) including on any resource consent granted for the use of land for a farming activity, conditions that require farming activities to operate at or below the ~~nitrogen loss rate that ensures that the Valley and Tributaries nitrogen load limit as calculated in accordance with Schedule 27 is not exceeded. the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than either the Baseline GMP Loss Rate or the agricultural nitrogen load limit as calculated in accordance with Schedule 27.~~

Northern Fan Freshwater Management Unit

15B.4.26 Freshwater quality is maintained within the Greater Waikākahi Zone by:

- (a) avoiding the granting of a resource consent that will allow the nitrogen loss calculation from a farming activity in the Greater Waikākahi Zone to exceed the Baseline GMP Loss Rate, except where Policies 15B.4.13, ~~and 15B.4.15~~ or 15B.4.15A apply; and
- (a) restricting nitrogen losses from the part of the property in the Greater Waikākahi Zone that is irrigated or used for winter grazing, to no more than 90% of the Good Management Practice Loss Rate or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate.

15B.4.27 Freshwater quality is maintained within the Whitneys Creek Zone by:

- (a) avoiding increases in nitrogen loss from farming activities that would cause the Whitneys Creek Zone nitrogen load limit, calculated in accordance with Schedule 27, to be exceeded; and
- (b) only granting resource consents for a farming activity to exceed the nitrogen baseline where the application demonstrates that the local in-stream and groundwater quality limits in Table 15B(c) and 15B(e) will not be exceeded; and
- (c) including on any resource consent granted for the use of land for a farming activity, conditions that require farming activities to operate at or below the nitrogen loss rate that ensures that the Whitney's Creek nitrogen load limit as calculated in accordance with Schedule 27 is not exceeded. ~~at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate or the agricultural nitrogen load limit as calculated in accordance with Schedule 27.~~

Part B Rules

15B.5.10 **The use of land for a farming activity on a property that forms part of a Nutrient User Group is a discretionary activity, provided the following conditions are met:**

1. A management plan is submitted with the application for resource consent, which sets out:

- (a) the properties forming the Nutrient User Group; and
 - (b) a map showing the location of all properties forming part of the Nutrient User Group; and
 - (c) the legal description of all properties and the legal names of the property owners forming part of the Nutrient User Group; and
 - (d) the method by which nitrogen losses will be managed and accounted for within the Nutrient User Group; and
 - (e) the method by which nitrogen losses will be redistributed upon any property or any part of any property withdrawing from the Nutrient User Group; and
2. A Farm Environment Plan has been prepared for each property in the Nutrient User Group in accordance with Schedule 7 and is submitted with the application for resource consent; and
 3. The nitrogen loss calculation for the Nutrient User Group does not cause the relevant limits set out in Tables 15B(c), 15B(d), 15B(e) and 15B(f) to be exceeded; and
 4. The aggregated nitrogen loss calculation for properties located within the Ahuriri Zone does not exceed the aggregate of the Baseline GMP Loss Rate for those properties; and
 5. The aggregated nitrogen loss calculation for properties located within the Haldon or Mid-Catchment Zone does not exceed the aggregate of the Upper Waitaki Headroom available for those properties; and
 - ~~6. For any property within a Lake Zone, the nitrogen loss calculation for the property does not exceed the lesser of the nitrogen baseline the Baseline GMP Loss Rate; and~~
 7. No property within the Nutrient User Group is part of a farming enterprise [or an irrigation scheme](#).

15B.5.15 Within the Ahuriri Zone or Upper Waitaki Hill Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 15B.5.14 is a controlled activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Ahuriri Zone or Upper Waitaki Hill Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budgets provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
- ~~5. Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of subsequent audits; and
8. Reporting of estimated nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and

9. The consistency of the proposal with Policy 15B.4.13.

15B.5.16A Within the Ahuriri Zone or Upper Waitaki Hill Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 2 of Rule 15B.5.16 is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted on the property.
3. The nitrogen loss calculation for that part of the property within the Ahuriri Zone or Upper Waitaki Hill Zone does not exceed the nitrogen baseline unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful.

15B.5.17 Within the Ahuriri Zone or Upper Waitaki Hill Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with condition 1 of Rule 15B.5.15 or condition 1 of Rule 15B.5.16A, or condition 1 of Rule 15B.5.16A, or the use of land for a farming activity as part of a farming enterprise that does not comply with conditions 1 or 34 of Rule 5.46A, is a non-complying activity.

15B.5.18 Within the Ahuriri Zone or Upper Waitaki Hill Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with ~~condition 2 of Rule 15B.5.15, or~~ condition 2 or 3 of Rule 15B.5.16A, or the use of land for a farming activity as part of a farming enterprise that does not comply with condition 2 or 3 of Rule 5.46A, is a prohibited activity.

15B.5.19 Within the Haldon Zone or Mid Catchment Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 5.54A is a controlled activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and

2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Haldon Zone or Mid Catchment Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
- ~~5. Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of subsequent audits; and
8. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. The consistency of the proposal with Policy 15B.4.13.

15B.5.20 Within the Haldon Zone or Mid Catchment Zone, the use of land for a farming activity on a property greater than 10 hectares in

area that does not comply with condition 2 of Rule 15B.5.19 is a restricted discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. The nitrogen loss calculation for the property does not exceed the Upper Waitaki Nitrogen Headroom available to the property; and
3. Except where areas of significant indigenous biodiversity have been identified and maintained in accordance with the provisions of any relevant district plan notified after 13 February 2016, the application for resource consent is accompanied by an assessment, undertaken by a suitably qualified ecologist, which identifies any areas of significant indigenous biodiversity located on the application area, and proposes methods to avoid or mitigate any adverse effects on significant indigenous biodiversity.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The potential adverse effects of the activity on mahinga kai; and
4. The potential adverse effects of the activity on wāhi tapu or wāhi taonga identified in an iwi management plan; and
5. The actual or potential adverse effects of the proposal on surface and groundwater quality and sources of drinking water; and
6. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
7. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Upper Waitaki Headroom; and

- ~~8. Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Upper Waitaki Headroom available for the property; and~~
9. Methods to address any non-compliances that are identified as a result of a Farm Environment Plan audit, including the timing of any subsequent audits; and
10. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
11. Until biodiversity provisions in a district plan are notified post 13 February 2016, the extent to which the proposal avoids or mitigates any adverse effects on any areas of significant indigenous biodiversity.

15B.5.25 Within the [Greater Waikakahi and Hakataramea Freshwater Management Unit River Zone or Hakataramea Hill Zone](#), the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 15B.5.24 or Rule [xx.xx.xx](#) is a controlled activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. The nitrogen loss calculation for the part of the property within the Hakataramea River Zone or Hakataramea Hill Zone does not exceed:
 - (a) Until 30 June 2020, the nitrogen baseline, unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016; and the application for resource consent demonstrates that the exceedance was lawful; and

~~—(b)—~~ From 1 July 2020:

- ~~(i) either the Baseline GMP Loss Rate or the Good Management Practice Loss Rate for the activity that occurred in the four years prior to 1 July 2020; and~~
- ~~(ii) for that portion of the property in the Hakataramea River Zone and that was used for winter grazing or irrigation in the four years prior~~

to 1 July 2020, 90% of that Good Management Practice Loss Rate figure; and

3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. ~~Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate and, which require the farming activity to operate at below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
5. Within the Greater Waikāhiki Zone and Hakataramea River Zone, Methods that restrict the nitrogen loss calculation for that portion of the property used for winter grazing or irrigation in the Hakataramea River Zone to 90% of the Good Management Practice Loss Rate or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate figure; and
6. Methods to exclude intensively farmed stock within 12m of the bed of the Hakataramea River and within 5m of the bed of all tributaries; and
7. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
8. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of subsequent audits; and

9. Reporting of estimated nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
10. The consistency of the proposal with Policy 15B.4.13 and Policy 15B.4.15; and
11. Within the Hakataramea Flat Zone, methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate or, where Policy 15B.4.15A applies, the Assessed Baseline GMP Loss Rate; and
12. Methods to restrict any area of the property within the Greater Waikāhahi Zone and Hakataramea River Zone to either the Baseline GMP Loss rate or the Good Management Practice Loss Rate or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate for the activity that occurred in the four years prior to 1 July 2020.

15B.5.26 Within the Greater Waikāhahi Zone and Hakataramea Freshwater Management Unit River Zone or Hakataramea Hill Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not meet condition 3 of Rule 15B.5.25, or one or more of the conditions of Rule 15B.5.7, is a restricted discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. The nitrogen loss calculation for the part of the property within the Hakataramea River Zone or Hakataramea Hill Zone does not exceed:
 - (a) Until 30 June 2020, the nitrogen baseline, unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016; and the application for resource consent demonstrates that the exceedance was lawful; and
 - ~~(b) From 1 July 2020:~~
 - ~~(i) either the Baseline GMP Loss Rate or the Good Management Practice Loss Rate for the activity that occurred in the four years prior to 1 July 2020; and~~

(ii) for that portion of the property in the Hakataramea River Zone and that was used for winter grazing or irrigation in the four years prior to 1 July 2020, 90% of that Good Management Practice Loss Rate figure.

The exercise of discretion is restricted to the following matters:

1. The content of, compliance with, and auditing of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The potential adverse effects of the activity on mahinga kai; and
4. The potential adverse effects of the activity on wāhi tapu or wāhi taonga identified in an iwi management plan; and
5. The actual or potential adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
6. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
7. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate (except where Policy 15B.4.15A applies). ~~and, which require the farming activity to operate at below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
8. Within the Greater Waikāhiki Zone and Hakataramea River Zone Methods that restrict the nitrogen loss calculation for that portion of the property used for winter grazing or irrigation in the Hakataramea River Zone to 90% of the Good Management Practice Loss Rate or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate figure; and
9. Methods to exclude intensively farmed stock within 12m of the bed of the Hakataramea River and within 5m of the bed of all tributaries; and

10. Methods to address any non-compliances identified as a result of a Farm Environment Plan audit; and including the timing of subsequent audits; and
11. Reporting of nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
12. The consistency of the proposal with Policy 15B.4.13 and Policy 15B.4.15; and
13. Within the Hakataramea Flat Zone, methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate (except where Policy 15B.4.15A applies); and
14. Methods to restrict any area of the property within the Greater Waikāhahi Zone and Hakataramea River Zone to either the Baseline GMP Loss Rate (or where Policy 15B.4.15A applies, the Assessed Baseline GMP Loss Rate) or the Good Management Practice Loss Rate (or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate) for the activity that occurred in the four years prior to 1 July 2020.

15B.5.27 Within the Greater Waikāhahi Zone and Hakataramea Freshwater Management Unit River Zone or Hakataramea Hill Zone use of land for a farming activity as part of a farming enterprise is a discretionary activity, provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the farming enterprise in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and
2. The nitrogen loss calculation for the farming enterprise does not exceed:
 - (a) Until 30 June 2020, the nitrogen baseline; and
 - (b) From 1 July 2020 the nitrogen loss calculation:
 - (i) does not exceed either the Baseline GMP Loss Rate or the Good Management Practice Loss Rate for the activity that occurred in the four years prior to 1 July 2020; and/or
 - (ii) it does exceed the the Baseline GMP Loss Rate and/or Good Management Practice Loss Rate but

the Farm Environment Plan submitted in accordance with condition 1 has been prepared by an Accredited Farm Consultant and contains a statement from that person that all applicable Good Management Practices have been adopted by the farming enterprise; and

- (iii) for that portion of those properties in the [Greater Waikāhahi Zone](#) and [Hakataramea River Zone](#) and that was used for winter grazing or irrigation in the four years prior to 1 July 2020, **does not exceed** 90% of the ~~eat~~ Good Management Practice Loss Rate **or where Policy 15B.4.x applies, the Assessed Good Management Practice Loss Rate figure.**

3. The properties comprising the farming enterprise are solely within [Hakataramea River Zone](#) or [Hakataramea Hill Zone](#), as shown on the Planning Maps.

15B.5.28 Within the [Greater Waikāhahi Zone](#) and [Hakataramea Freshwater Management Unit River Zone or Hakataramea Hill Zone](#), the use of land for a farming activity on a property greater than 10 hectares in area that does not meet condition 1 of Rule 15B.5.25, or condition 1 of Rule 15B.5.26, or the use of land for a farming activity as part of a farming enterprise that does not comply with condition 1 of Rule 15B.5.27, is a non-complying activity.

15B.5.29 Within the [Greater Waikāhahi Zone](#) and [Hakataramea Freshwater Management Unit River Zone or Hakataramea Hill Zone](#), the use of land for a farming activity on a property greater than 10 hectares in area that does not meet condition 2 of Rule 15B.5.25, or conditions **2, 3 or 4** of Rule 15B.5.26A, or the use of land for a farming activity as part of a farming enterprise that does not comply with conditions 2 or 3 of Rule 15B.5.27, is a prohibited activity.

15B.5.34 Within the [Valley and Tributaries Zone](#) and [Whitneys Creek Zone](#), the use of land for a farming activity on a property greater than 10 hectares in area that does not comply with one or more of the conditions of Rule 5.57B is a controlled activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent; and

2. Until 30 June 2020, the nitrogen loss calculation for the part of the property within the Valley and Tributaries Zone and Whitneys Creek Zone does not exceed the nitrogen baseline, and from 1 July 2020 the Baseline GMP Loss Rate; unless the nitrogen baseline was lawfully exceeded prior to 13 February 2016, and the application for resource consent demonstrates that the exceedance was lawful; and
3. The Farm Environment Plan and nutrient budget submitted with the application for resource consent has been prepared or reviewed by an Accredited Farm Consultant.

The CRC reserves control over the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the nitrogen loss calculation for the farming activity to a rate not exceeding the Baseline GMP Loss Rate; and
- ~~5. Methods that require the farming activity to operate at or below the Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the Baseline GMP Loss Rate; and~~
6. Methods to avoid or mitigate adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of subsequent audits; and
8. Reporting of estimated nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. The consistency of the proposal with Policy 15B.4.13; and

- 10 Within the Whitney's Creek Zone, methods to ensure compliance with the Good Management Practice Loss Rates, or where Policy 15B.4.x applies the Assessed Good Management Practice Loss Rates, for the farming activity, inclusive where relevant, of any nitrogen received from any industrial discharge.

15B.5.35 Within the Valley and Tributaries Zone and Whitneys Creek Zone, the use of land for a farming activity on a property greater than 10 hectares in area that does not meet condition 2 or 3 of Rule 15B.5.34, or one or more of the conditions of Rule 15B.5.7, is a restricted discretionary activity provided the following conditions are met:

1. A Farm Environment Plan has been prepared for the property in accordance with Part A of Schedule 7 and is submitted with the application for resource consent.
2. The nitrogen loss from the farming activity does not cause the Valley and Tributaries Zone and the Whitneys Creek Zone agricultural nitrogen load limit calculated in accordance with Schedule 27 to be exceeded.

The exercise of discretion is restricted to the following matters:

1. The commencement date for the first audit of the Farm Environment Plan; and
2. The content, quality and accuracy of the OVERSEER® budget provided with the application for resource consent; and
3. The timing of any actions or good management practices proposed to achieve the objectives and targets described in Schedule 7; and
4. Methods that limit the maximum amount of nitrogen that can be leached from the loss calculation for the farming activity to a rate not exceeding the agricultural nitrogen load limit, calculated in accordance with Schedule 27 for the relevant zone that the property is located in; and
5. Methods that require the farming activity to operate at or below the ~~Good Management Practice Loss Rate, in any circumstance where that Good Management Practice Loss Rate is less than the rate required to ensure Condition 2 of this rule can be met.~~ agricultural nitrogen load limit, calculated in accordance with Schedule 27; and

6. ~~Methods to avoid or mitigate~~ The actual or potential adverse effects of the activity on surface and groundwater quality and sources of drinking water; and
7. Methods to address any non-compliance identified as a result of a Farm Environment Plan audit, including the timing of subsequent audits; and
8. Reporting of estimated nutrient losses and audit results of the Farm Environment Plan to the Canterbury Regional Council; and
9. Methods to ensure compliance with the in-stream and groundwater concentration limits in Tables 15B(c) and 15B(e) for the applicable node.
10. Within the Whitneys Creek Zone, the potential adverse effects of the activity on mahinga kai; and
11. Within the Whitneys Creek Zone, the potential adverse effects of the activity on wāhi tapu or wāhi taonga identified in an iwi management plan; and
12. Within the Whitneys Creek Zone, methods to ensure compliance with the Good Management Practice Loss Rates or where Policy 15B.4.x applies the Assessed Good Management Practice Loss Rates, for the farming activity, inclusive where relevant, of any nitrogen received from any industrial discharge.

Appendix 2 – Section 32 Evaluation

Section 32AA of the Act requires a further evaluation in accordance with Section 32(1) to (4) in respect of any changes that are made to or proposed for, the plan change since the Section 32 evaluation report was completed. This Appendix sets out that further evaluation.

Section 32 (1) (a) - Appropriateness of the objective(s) in achieving the purpose of the Act

The proposal does not include any change to the objectives of PC5.

Section 32 (1) (b) (i) - Reasonably practicable options for achieving the objective(s)

Section 7 of the Section 32 Report (February, 2016) sets out the evaluation of the Region-wide provisions. There does not appear to be any alternative to the Portal, as an exclusive means of setting limits, identified or evaluated in the CRC's Section 32 Report. Nor does that report expressly evaluate the merits of the Portal in that regard (although the benefits of the general approach are inherent in the evaluation of how PC5 provides for GMPs and monitoring and reporting of nitrogen losses).

The alternative option to be evaluated here is as summarised in paragraph 4.4 of this evidence.

Section 32 (1) (b) (ii) – Efficiency and effectiveness of the proposed provisions

The most efficient proposal is generally held to be the one that achieves the objective at least cost (or, to the extent that the degree of benefit may vary between options, the option with the greatest net benefit – where net benefit is benefit less cost).

Section 32 (2) provides that the assessment of costs and benefits should specifically consider impacts on economic growth and employment and be quantified if practicable.

The effectiveness of the proposal is the extent to which the objective is achieved (including, where relevant, the dependability and timeliness of its achievement).

In simple terms, the question to be addressed here is whether the proposal advanced in this evidence will achieve the objectives sought, as expressed in Section 3 and Policies 4.1 – 4.6 (including the freshwater outcomes of Table 1) of the CLWRP, at less cost and with the same or similar dependability as the provisions of PC5 as notified.

Detailed information on the relative costs and benefits of the various options is not available. However, I have identified broad costs and benefits as set out in the following table.

Table 1 – Section 32 Evaluation

Council's proposal (Use of the Portal as the sole means of determining whether a farming activity should be consentable or prohibited)	Fonterra Proposal (Alternative Pathway through a discretionary activity consent. Retention of Portal defined limits as default test)
Benefits	
<ol style="list-style-type: none"> 1. High level of certainty and objectivity in determining consent status and prohibited activity status. 2. Reduced consenting and consent processing costs due to greater certainty around the applicable limits. 3. A high level of consistency in the way farming activities are treated. 	<ol style="list-style-type: none"> 1. Addresses anomalies/allows for tailored approach to be taken to farming systems which OVERSEER® does not model. 2. Potentially avoids a number of farming activities that are operating at GMP or better becoming prohibited or having to operate beyond good management practice incurring added operating and/or opportunity costs. 3. For the above reason, it avoids unnecessary economic cost (with implications for GDP and employment) 4. Allows benefits of the Portal (see adjacent column) to accrue to those who have no reason not to comply with it.
Costs	
<ol style="list-style-type: none"> 1. Will likely require some farms to operate at better than GMP standards or be prohibited. 2. For the above reason, likely economic costs associated with those farms operating at GMP but not meeting Portal limits facing higher operating costs to comply or forgone production 3. Could lead to limits being 	<ol style="list-style-type: none"> 1. Some added consent processing cost associated with those farms using the alternative pathway (including need for professional advice) 2. Some potential for added nitrogen discharge over and above that allowed by Farm Portal.

determined according to the nature/complexity of the farm system rather than whether GMP is being adopted (with resulting perception of unfairness).	
Risk of acting or not acting	
<p>Two key risks are identified:</p> <ol style="list-style-type: none"> 1. There is insufficient information regarding the number of farms for which the Portal could not generate a reliable N loss limit and hence uncertainty on the number of farms that would use the alternative pathway. 2. There is also uncertainty about the difference in the limit generated through the Portal relative to that devised through the alternative pathway assessment. These risks in turn constitute a risk to the achievement of water quality outcomes. <p>The risk of acting with these uncertainties is assessed as follows.</p> <p><u>Number of farms using portal versus alternative pathway</u></p> <p>This risk has been addressed by the introduction of a gateway test in the form of a policy that only allows CRC to authorise a farming activity without using the Portal if it can be shown that there are particular technical reasons/farm system peculiarities that mean the Portal result is likely to be unreliable. In my view that addresses the risk and ensure that the alternative pathway is the exception rather than the rule.</p> <p><u>Difference between Portal generated and alternative pathway limits</u></p> <p>This risk has been addressed through two means. First, the requirement that the nitrogen baseline cannot be exceeded by an activity using the alternative pathway. Second, there is an upper limit proposed in the form of the Assessed GMP rates. This involves the applicant demonstrating that alternative rate is achieved using all applicable GMPs. It will not be possible to simply default to the nitrogen baseline if a lesser discharge rate is achievable. In that case a reduction in nitrogen loss from all farms (relative to their nitrogen baseline) is more likely than not.</p> <p><u>Risk of not acting to provide the alternative pathway</u></p> <p>In addition to the costs identified above, in the absence of the alternative pathway approach more farms are likely to rely on the Portal not generating a limit (because an OVERSEER® will be unable to run) and hence the nitrogen baseline would apply (under the definition of Baseline GMP). The alternative pathway would deliver a better outcome relative to that scenario.</p>	
<p>Overall assessment</p> <p>Based on the costs and benefits identified above, the risks of acting or not</p>	

acting and the means proposed to address those risks, I consider that the Fonterra proposal is a more appropriate means of delivering on the CLWRP objectives, including Objective 3.24 being that *“All activities operate at good environmental practice or better to optimise efficient resource use and protect the region’s fresh water resources from quality and quantity degradation.”*