

**BEFORE INDEPENDENT HEARING COMMISSIONERS**

**AT HAMILTON**

**IN THE MATTER**

of the Resource Management Act 1991

**AND**

**IN THE MATTER**

of the hearing of submissions on Proposed Plan  
Change 1 to the Waikato Regional Plan

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**STATEMENT OF PRIMARY EVIDENCE OF GERARD MATTHEW WILLIS  
FOR FONTERRA CO-OPERATIVE GROUP LTD (SUBMITTER 74057)**

**BLOCK 2 HEARINGS**

**PLANNING**

**3 MAY 2019**

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**RICHMOND**  
CHAMBERS

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## 1. EXECUTIVE SUMMARY

1.1 My name is Gerard Matthew Willis. My planning evidence addresses issues related both to Fonterra's farming and manufacturing interests that are relevant to the Block 2 hearing.

1.2 In terms of Fonterra's farming interests, my evidence makes the following points.

(a) Certified Industry Schemes (**CISs**) provide a range of benefits not well recognised in the s42A Report. The scale of the task facing the Council in implementing Proposed Plan Change 1 (**PC1**) is very large and I am not aware of evidence that it can undertake that role in a reasonable time period. Including CISs in PC1 in a meaningful way is important for effective and timely implementation. While the notion of using CISs as included in PC1 as notified is innovative and does raise a number of issues and risks, in my opinion those issues and risks can be adequately managed and resolved (including by external audit of CISs).

(b) The Block 2 Section 42A Report (**s42A Report**) recommendation to amend rule 3.11.5.3 from a permitted activity to a restricted discretionary activity (**RDA**) rule is unlikely to pass any reasonable section 32 evaluation. Although section 70 has been raised by the s42A Report as a constraining factor, in my opinion, that is not an obstacle. In any event, the discharge rule recommended by the s42A Report makes any permitted discharge conditional on there not being any section 70 effects. For all those the reasons, I support retaining Rule 3.11.5.3 as a permitted activity rule.

(c) I agree that there are challenges with using Overseer to model nitrogen (**N**) losses (not least the capacity constraints), however, I have serious reservations about the approach proposed in the s42A Report of using provision of farm input data (including stocking rates) as an alternative to Overseer

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modelling. I am not aware of evidence that suggests the complying with such basic input controls can reliably demonstrate steady state leaching. In my opinion, Fonterra's proposal for use of the Nitrogen Risk Scorecard (**NRS**) would deliver a more reliable planning outcome. For that reason, I support incorporation of the NRS within rules as set out in **Attachment 1**.

- (d) It is important to remember that the Waikato catchment has challenges across all four diffuse contaminants. For that reason I do not support low intensity farms greater than 20ha being able to farm without a Farm Environment Plan (**FEP**) and recommend that rule 3.11.5.2 be amended to required FEPs for such farms.
- (e) Policy 1 is a key policy but, as recommended by the s42A Report, it remains unclear as to the policy "test" that applies in the consideration of consent applications. I propose changes to that policy to, in particular, clarify that the reductions in N leaching required of farms between the 50<sup>th</sup> and 75<sup>th</sup> percentiles is that achieved by the adoption of Good Farming Practice (**GFP**).
- (f) Despite Fonterra's submission I accept that, due to capacity constraints, there is likely to be a need to prioritise the preparation of FEPs. However, in my analysis, current prioritisation has paid little attention of *E.coli* contamination levels at the sub catchment level. For that reason, I consider the stock exclusion requirements (critical to *E.coli* management) should be decoupled from FEP prioritisation (i.e. they should apply to everyone at the same time).

1.3 In terms of Fonterra's manufacturing interests, my evidence makes the following points:

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- (a) Policy 10 (recognising regionally significant industry) should be retained, although inclusion of reference to the applicability of Policies 11 and 12 would, in my opinion, be prudent.
- (b) Policy 11 should be clarified such that it is clear that any offsetting (after the application of best practicable option (**BPO**)) may be necessary and appropriate when there are significant residual effects (i.e. additional contaminant load or, in the case of a replacement consent, an insufficient reduction in contaminant load).
- (c) Policy 12 is supported but, contrary to the s42A Report, should be clarified to avoid the suggestion that mitigation of point source effects will enable water quality targets to be met. Recognition of the diminishing return on investment in treatment plant upgrades should be retained.
- (d) Policy 13 requires clarification to provide greater certainty about consent duration. A key purpose of the policy should be to incentivise capital investment in treatment infrastructure.
- (e) There are issues arising from the potential for farms taking industrial process wastewater to be subject to overlapping land use and diffuse and point source discharges rules. One means of minimising that overlap is to ensure wastewater disposal farms that do not keep livestock (i.e. are solely engaged in cut and carry) are not subject to farming rules. There is also a need to ensure integration between any required FEP and management plans required by discharge consents.

## 2. INTRODUCTION

2.1 My full name is Gerard Matthew Willis.

2.2 I am a director of Enfocus Limited, a resource management consultancy based in Pukekohe. I have practised as a planner and resource management specialist for the past 30 years.

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2.3 I have the qualifications and experience set out in my statement of evidence I presented at the Block 1 hearing.

**3. BACKGROUND TO PROPOSED PLAN CHANGE 1**

3.1 My involvement in PC1 commenced in October 2016 following its public notification. I was initially engaged to assist with the preparation of a submission on behalf of Fonterra. In my capacity as independent planning adviser I worked with staff from Fonterra.

3.2 I was engaged in the same capacity in April 2018, to assist Fonterra with its submission on Variation 1.

3.3 I am familiar with the provisions of PC1 to which these proceedings relate. In preparing my evidence I have reviewed the following documents:

- (a) Waikato Regional Plan Change 1 – Waikato and Waipā River Catchments: Section 32 Evaluation Report.
- (b) Section 42A Report Proposed Plan Change 1, Waikato and Waipā River catchments, Block 2 (Parts C-C6).
- (c) Water Quality Attributes for Healthy Rivers: Wai Ora Plan Change, Waikato Regional Council Technical report 2018/66.
- (d) Restoring and Protecting Our Water, Overview of Collaborative Stakeholder Group's Recommendations for Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments.

3.4 I have also read the following evidence submitted as part of these Block 2 hearings:

- (a) Mr Richard Allen (Environmental Policy Manager, Fonterra).
- (b) Ms Brigid Buckley (National Policy Manager, Fonterra).
- (c) Mr Martin Neale (Scientist, for Fonterra).
- (d) Mr James Allen (Farm Adviser, for Fonterra).

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### **Code of Conduct**

- 3.5 Although this is a Council hearing, I have read the Environment Court's Code of Conduct and agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this statement of evidence are within my area of expertise.

### **Scope of Evidence**

- 3.6 I have been asked to provide planning evidence on the following matters and structure my statement accordingly:

- (a) Fonterra's submission insofar as it addresses diffuse discharges associated with farming and, in particular:
  - (i) CISs and permitted activity rule 3.11.5.3;
  - (ii) the NRS as an alternative N management tool to Overseer modelling for low and medium risk farms;
  - (iii) Policy 1 and the expectations about N discharge reductions from those farms below the 75<sup>th</sup> percentile of N leachers; and
  - (iv) FEPs as a key planning tool for all farms.
- (b) Fonterra's submission insofar as it addresses point source discharges associated with dairy processing/manufacturing sites and, in particular:
  - (i) Policy 10 and discharges from regionally significant industry;
  - (ii) Policy 11 and the relationship between BPO and offsetting;
  - (iii) Policy 12 and the obligation to meet attribute states; and

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- (iv) Policy 13 and the relationship between consent durations and committed contaminant discharge reductions.

3.7 Where in this evidence I provide suggested redrafting of provisions:

- (a) Text in blue underscored font is as proposed by me and is consistent with that used in the Fonterra submission.
- (b) The red underscored font is text proposed in the s42A Report.

3.8 I can confirm that, on the basis that the s42A Report recommendations are accepted by the Hearing Panel, acceptance of the amendments detailed in this evidence would satisfy Fonterra's submission and further submission in relation to those parts of the submission addressed by this Block 2 hearing.

#### **4. RELEVANT STATUTORY INSTRUMENTS**

4.1 I agree with the identification of relevant statutory instruments as set out in Appendix Section 3 of the s42A Report and more fully in Part A of the Section 32 Report. Except as I might otherwise state in this evidence, I agree with the assessment contained in s42A Report. In my opinion, at least insofar as the matters raised by the Fonterra submission are concerned, PC1 gives effect to, is not inconsistent with, or takes into account (as applicable), the various relevant statutory instruments.

#### **5. OVERVIEW OF FONTERRA'S SUBMISSION ON ITS FARMING (DIFFUSE DISCHARGE) INTERESTS**

5.1 The Fonterra submission is generally supportive of the PC1 notified provisions addressed in the Block 2 hearing. Most of the various amendments suggested in the submission aim to improve clarity and certainty rather than seek any fundamental change in policy direction. That point made, there are some specific proposals contained within the Fonterra submission (particularly the submission made to Variation 1) that are important in terms of the obligation under section 32 to ensure the policies are the most appropriate means to give effect to the

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objectives having regard to effectiveness and efficiency (in turn based on a consideration of benefits and costs). These matters are set out below.

## **6. CERTIFIED INDUSTRY SCHEMES**

6.1 The way CISs are proposed to be used in PC1 is described in the s42A Report (pages 126-127) and is not repeated here other than to say that, in practical terms, the use of CIS would offer the following benefits:

- (a) The scheme owner will ensure its members are registered with the Council and will ensure that they have prepared a Nutrient Reference Point ("**NRP**") as required by PC1.
- (b) The scheme owner will ensure its members have FEPs prepared and approved by certified farm environment planners ("**CFEPs**") and will submit those FEPs (in the agreed format), on behalf of its members, to the Council within the required timeframes.
- (c) The scheme owner will oversee implementation of its members' FEPs, including by:
  - (i) providing annual Overseer assessments to assess compliance with the NRP (to the extent these annual assessments are required); and
  - (ii) working with members to ensure they understand their regulatory commitments.
- (d) The scheme owner will monitor compliance of its members with rule 3.11.5.3 of PC1 (including compliance with the itemised actions set out in the FEP). This will include an on farm visit, the results of which will be made available to the Council in an agreed format.



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- (e) The scheme owner will report member non-compliance to the Council (allowing Council to take enforcement action against that individual member as appropriate).
- 6.2 Importantly, the monitoring and enforcement roles set out in (d) and (e) above do not *replace* those of the Council but simply complement the Council's role (i.e. make it easier and more efficient for the Council to carry out those functions). While the reporting role is undertaken by the scheme owner, this reporting would otherwise be undertaken directly by the individual farmers.
- 6.3 The scheme owner's roles set out above are not always fully explicit in PC1 but are set out in detail in the application by Fonterra to be a CIS (application attached to the evidence of Mr Allen, for Fonterra).
- 6.4 In my opinion, the benefits of the CIS are significant. The CIS addresses the very real issue outlined in the section 32 Report (page 154) and at para 807 of the s42A report. That is, that in the Waikato and Waipa river catchments there are some 5,000<sup>1</sup> farming activities needing an FEP. The Waikato Regional Council would face a very significant additional burden should it be solely responsible over all 5,000 properties for:
- (a) overseeing the development of those FEPs (including ensuring there was sufficient CFEPs;
  - (b) supporting and monitoring implementation;
  - (c) ensuring widespread compliance; and
  - (d) consenting the activities (something that would require Council to retain significant farm system expertise, at the same time as thousands of other farmers in the catchment were also seeking farm system expertise).
- 6.5 I have not seen any evidence that the Council could effectively manage that burden and implement PC1 in a timely way should PC1 not include

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<sup>1</sup> I note that in his Block 1 hearing evidence Mr Lee Matheson suggested that the number of blocks over 20ha was nearly 14,000 so the 5,000 estimate I have used may well be highly conservative.

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provision for CIS in the manner proposed. At best there would be a very long implementation phase-in (much longer than currently proposed). That would, in turn delay the benefits to the Waikato and Waipa River catchments.

**Section 42A report on risks of not having CISs**

- 6.6 The section 42A Report notes (para 807) that if all farming activities required consent *“WRC would need to reconsider its implementation process to ensure that there was capacity to process this number of applications. “It may be necessary to stage implementation over a longer period...”*.
- 6.7 Despite that recognition, a recommendation is made for all farms to be subject to RDA consent rather than relying on CISs and the permitted activity rule as exists in PC1 as notified. No analysis (other than the above quote) is provided of exactly what that would mean in terms of ability to implement PC1 in a reasonable timeframe. I am unclear how such a recommendation could be made without a robust section 32 assessment covering this key point. In my opinion (and for reasons that follow), it would seem unlikely that a section 32 evaluation could demonstrate that the planning approach recommended in the s42A Report (and the effective side-lining of the CIS as a key plan implementation tool) is superior to that contained in PC1 as notified.
- 6.8 I note also that the s42A Report focuses on processing consents, but that is not the only additional obligation (and cost) that would flow to the Council should CIS not be adopted in a meaningful way.
- 6.9 In my opinion, the effect of the CIS proposal within PC1 is to significantly reduce the burden on the Council. The effect of the recommendation of the s42A Report (if adopted) would be to greatly increase the burden on the Council and the rural professional sector.
- 6.10 I note that Mr Lee Matheson’s Block 1 hearing evidence raised concern about the ability of the rural professional community to prepare the number of required FEPs in the timeframes proposed. The constraint on capacity that Mr Matheson highlights applies not just to FEP certification

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but also to the preparation of material to support applications for resource consent.

**Fonterra's CIS proposal**

6.11 Fonterra has already applied for certification of an industry scheme as described in the evidence of Mr Allen. That scheme alone has the opportunity to reduce the number of FEPs (and potential consents) that the Council must manage by 2,100 (assuming all Fonterra supplier farms in the catchment elected to be part of the Fonterra scheme). That level of commitment must make a significant contribution to the ability to implement PC1 in a timely and effective manner. From a section 32 perspective:

- (a) Effectiveness must be improved by the contribution of capacity that allows implementation in the proposed timeframes (rather than some unspecified delayed timeframe that the s42A report says may be required); and
- (b) Administrative efficiency must be improved by:
  - (i) a single entity acting collectively for members providing a range of information in a standardised format using professional information management systems; and
  - (ii) avoiding the need for thousands of resource consent applications and full Assessments of Environmental effects (**AEEs**) and the thorough assessment of those applications and AEEs (as confirmed as being required for any application by the Environment Court in *Wellington Fish and Game v Manawatu Wanganui Regional Council*<sup>2</sup>).

6.12 Although the s42A Report continues to provide for CISs, it does so in a way that provides no real incentive for industry to participate; such an incentive exists in PC 1 as notified. Based on the evidence of Mr Allen I understand that Fonterra would be extremely unlikely to proceed with

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<sup>2</sup> ENV-2016-WLG-00003 [2017]

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the effort and expense of becoming certified, and implementing, its proposed CIS when there is no significant regulatory benefit to its members. In that case it is difficult to understand how the s42A recommendation in respect of CISs can be preferable in section 32 terms to PC1 as notified.

**Characteristics of the CIS approach and key means of managing risk**

- 6.13 Although dealt with more directly in legal submissions presented on behalf of Fonterra, from a planning perspective I make the following points.
- 6.14 First, the roles set out in paragraph 6.1 above do not, in my opinion, represent any delegation of section 30 functions or powers to a CIS provider:
- (a) The CIS does not “approve” an FEP or exercise discretion as to what is in that FEP. That is the role of the CFEP (who is in turn certified by Council and answerable to Council in the event that questions are raised about the quality or independence of their work). That CFEP role exists for all options discussed in the s42A Report.
  - (b) Monitoring and enforcement functions and powers stay with the Council. They are not delegated to the scheme owners. The CIS will simply provide assistance to make Council’s role in that regard more efficient and effective.
  - (c) The reporting undertaken by the CIS owners is reporting that would otherwise be undertaken directly by the farmers, and so this cannot represent any form of unlawful delegation insofar as the Council is concerned.
- 6.15 Second, there ought to be no unmanageable conflicts of interest associated with CIS owners working on behalf of their members to ensure compliance with rule 3.11.5.2 of PC1. There are many checks and balances that can be put in place to address any such real or perceived risks. I set out the key checks and balances at paragraph

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6.35 of my Block 1 evidence noting that the Council has full discretion as to what is assessed, and who is approved to undertake certain roles. I do not repeat that evidence here except to emphasise that individual CFEPs will have to retain their professional independence. That is not unique to PC1 and in fact is required to happen in many facets of RMA procedure at present.

6.16 I would also emphasise the important role of internal and external audit of CISs.

6.17 By "internal audit" I mean:

- (a) peer review of FEPs; and
- (b) monitoring visits of farms (by an appropriately qualified and experienced representative of the scheme owner) to ensure implementation of FEPs.

6.18 Both of these are part of the Fonterra proposal as discussed by Mr Allen.

6.19 By "external audit" I mean the provision for an external (independent) party to be appointed to annually review the practices and processes of the CIS owner to ensure that it is doing what it is required to do and that the information it is providing to the Council (particularly on the performance of its members in complying with FEPs) is accurate and timely. As discussed by Mr Allen, the Fonterra CIS proposes annual external audit of 5% of the FEPs produced<sup>3</sup> (to ensure they have identified and addressed appropriate risks) and 5% of the monitoring reports (to ensure mitigation actions proposed in the FEPs have been implemented in time and to standard).

6.20 In my opinion these procedures and reporting obligations, together with the Council's oversight of whether a CIS has all necessary components and resources, provides a very high level of assurance that CISs are credible and that the public can have a high degree of confidence in their effectiveness.

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<sup>3</sup> Potentially over 100 each year.

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- 6.21 Because the role of the CIS is administrative not regulatory, Council does not need a specific function in the Act to certify industry schemes.
- 6.22 In short, it is important to understand that the purpose of a CIS is to help individual farmers meet their responsibilities and, at the same time, provide assistance to the Council so that it can undertake its responsibilities efficiently and effectively. A CIS does not undertake Council functions. Furthermore, with sound internal and external processes, the information a CIS provides to the Council can be considered reliable (and certainly more consistent and reliable than would be received from more than 5,000 individual farmers).
- 6.23 Mr Milne's Block 1 legal submission, on behalf of the Council, is that the concept of CIS as proposed in PC1 was lawful. Mr Matheson's legal submissions presented on behalf of Fonterra in the Block 1 hearings was likewise that the CIS as proposed in PC1 was lawful. This issue will be further addressed in legal submissions presented for these Block 2 hearings.

**Environmental risk of Rule 3.11.5.3 and section 70 of the Act**

- 6.24 An issue raised by the s42A Report is that of section 70 of the Act and that section's requirement for the Council to be satisfied that certain adverse environment effects will not result from a certain discharge activity before making that activity a permitted activity.
- 6.25 The s42A Report states that the officers agree that section 3.11.5.3 *"may not comply with section 70(1) due to the uncertainty about the effects occurring on individual properties (including cumulatively if the assumed very large number of properties are within the CIS framework) and the effectiveness of mitigation measures in place or proposed through FEPs to address those effects"*.
- 6.26 No analysis is provided in the s42A Report regarding which of the effects set out in section 70(1) the Council cannot be satisfied will not occur, or where in particular (i.e. which reaches or sub-catchments) these effects are expected to occur (or continue). The assumption seems to be that

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some effects might occur depending on what is occurring on individual properties.

- 6.27 A further statement is made in the same section of the s42A Report (para 804) that the CIS approach represents *“a high risk that effect is not given to the Vision and Strategy or the NPS-FM or that the plan’s objectives are not achieved. In part this is influenced by a lack of clear accountability and responsibility under the notified framework.”*
- 6.28 I do not find that analysis compelling. The Vision and Strategy does need to be given effect to, as does the NPSFM, but those are not matters directly relevant to the very specific test of section 70(1) of the Act. Furthermore, the evidence of Mr Allen and the documentation Fonterra submitted to the Council to have an industry scheme certified, very clearly defines where accountability and responsibility rests (at least in respect of that scheme).
- 6.29 The test that appears to be applied by the s42A Report authors (uncertainty as to effects occurring in individual properties and the effectiveness of mitigation measures) is not in my opinion the correct one. If applied as suggested it would prevent virtually *any* permitted activity rule being included in any regional land and water plan. The correct test is whether the Council can be satisfied that the specified effects will not occur as a result of the activities being authorised (which, I might add, excludes consideration of a number of activities being undertaken on a farm – including discharge of farm dairy effluent – that are subject to separate authorisation under the regional plan).
- 6.30 In terms of the specific section 70(1) effects, there are two possible scenarios:
- (a) first, those effects do not occur now but could be expected to result from implementation of the permitted rule because that rule would allow an increase in contaminant losses that result in the specified adverse effects; or
  - (b) that those effects occur already and do so as a result of the activities to be permitted and hence, unless there can be

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mitigations imposed through the permitted activity/CIS rule that mean those effects do not occur post implementation of the permitted rule, those effects can be expected to continue.

- 6.31 In my opinion, in terms of rule 3.11.5.3 the first of those scenarios is not a plausible one. The overall intensity of dairy farming (at least) is managed to a very significant degree by the cap on nitrogen loss represented by the NRP. That is a matter that is metricised and compliance easily assessed (Overseer issues aside). Similarly, stock exclusion is a clear and effective measure that is required by Rule 3.11.5.3 and can be expected to reduce further physical damage to aquatic habitat. More broadly, the prospect of any FEP, no matter who has prepared it, endorsing practices that are more environmentally damaging (higher contaminant discharging) than those currently employed seems to me unrealistic.
- 6.32 The second scenario is more difficult to assess. The effect specified in section 70(1) that is most obviously of potential relevance to the activity (and diffuse discharges) permitted is a “significant adverse effect on aquatic life”.
- 6.33 Accordingly, an assessment of the extent to which those effects already occur as a result of the activities likely to be permitted by Rule 3.11.5.3, is required (but does not appear to have been undertaken or referenced by the s42A Report authors). It is important to recognise that the test is not that *some* adverse effect on aquatic life will result. The test is that any adverse effect is *significant*.
- 6.34 I am not aware that there is an accepted measure for determining a *significant* adverse effect on aquatic life. Any technical measure of that would be outside my expertise. However, one planning approach would be to apply the NPSFM attributes that relate to ecosystem health (as set out in Appendix 2 of the NPSFM).
- 6.35 In terms of rivers, the two relevant NPSFM attributes are nitrate (for toxicity) and periphyton.



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- 6.36 The current state of nitrate-nitrogen (NO<sub>3</sub>-N/L) was provided in the March 2016 CSG report *Restoring and Protecting Our Water*. That showed that across the catchment NO<sub>3</sub>-N/L levels are well below (i.e. do not come close to exceeding) the national bottom line for nitrate toxicity (being 6.9mg/L as an annual median). In fact, of the 65 monitoring sites throughout the Waikato and Waipa River catchments 48 sites recorded NO<sub>3</sub>-N/L levels over the 2010-2014 period of <1mg/L, putting them in the "A" band as described by the NPSFM. The worst level recorded across the catchment was 3.5mg/L (NPSFM "C" band). All sites with an annual average above 1mg/l were specific tributary streams (rather than the main stem). Although I am not a water quality scientist, that monitoring data does not indicate to me that there is currently (as a result of existing farming activities) a significant effect on aquatic life relating to nitrate toxicity.
- 6.37 I understand that there can be effects on ecosystem health from N levels well below toxicity levels. N and P can result in effects on wider habitat quality (periphyton, in particular, is regarded as the main sub toxic ecological health stressor). That is why it is included as an attribute related to ecosystem health in Appendix 2 of the NPSFM.
- 6.38 In terms of periphyton, I note that the report *Water Quality Attributes for Healthy Rivers: Wai Ora Plan Change*<sup>4</sup>, records (page 12) that previous surveys of periphyton at monitored sites does not indicate periphyton to be problematic with only 2 samples out of a total of 146 samples showing periphyton cover greater than 55% (the cut-off for nuisance growth levels). 90% of samples showed periphyton cover less than 20% (indicative of high quality) and no evidence of proliferations<sup>5</sup>.
- 6.39 No quantified attribute states are provided for N and P in the NPSFM in respect of rivers.<sup>6</sup> Table 3.11-1 does include target attribute states for annual median TN and annual median TP and for Chlorophyll a (as an indicator of phytoplankton). It is beyond my expertise to assess

<sup>4</sup> HR/TLG/2016-2017/2.1A, Waikato Regional Council Technical report 2018/66.

<sup>5</sup> I understand and acknowledge that it was for this reason that experts concluded periphyton was of limited value in assessment ecosystem health in the Waikato Catchment.

<sup>6</sup> Although there is a note below the periphyton attribute table requiring councils to set appropriate DIN and DRP exceedance criteria (which PC1 does for the main stems).

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compliance against these thresholds or provide an interpretation of meaning relative to current state and the significance of effect. I simply note my understanding that the appropriateness of some of these attribute states is a matter being contested through these hearings.<sup>7</sup>

- 6.40 For those reasons, it is not clear to me that the evidential case for concluding that the existing activities potentially permitted by Rule 3.11.5.3 are resulting in a significant adverse effect on aquatic life across the entire catchment has been made. (Although I am aware of evidence that are discrete areas where that may be the case<sup>8</sup>). The s42A Report authors simply appear to have assumed that there are such effects everywhere but have not pointed to evidence of that.
- 6.41 It is important also to take contaminant loss *reductions* to be achieved by these activities under the CIS/permitted rule framework. While I agree with the s42A report authors that the extent of the reductions achieved cannot be known, as noted earlier, Rule 3.11.5.3 requires stock exclusion (including setbacks) being a clear and measurable performance standard. It also requires FEPs. Given that, and the robust nature of the proposal for CIS certification put forward by Fonterra, an assumption that there would be no environmental improvement (relative to the status quo) from FEPs and the CIS would seem to me to be an unfair and unlikely conclusion to draw.
- 6.42 The other point to note is that the s42A Report does not appear to identify any section 70 compliance issue with permitted activity rule 3.11.5.2 despite that rule expressly allowing for an increase in stocking rates of 66% (from 6 to 10 su/ha) for low intensity farms. I am not aware of any analysis in the s42A Report that predicts what that would mean for N loss from those farms or how that would not lead to a cumulative adverse effect in terms of total contaminant load. In short, the logic applied by the s42A Report on the matter of section 70 does not appear to have been applied consistently across land use activities and

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<sup>7</sup> See, for example, the Block 1 evidence of Mr Craig Depree for DairyNZ who states that there is not a compelling case to apply the lake-based TN, TP and Chl a attributes to manage the trophic state in the Middle or Lower Waikato (as included in PC1 are notified) because these are designed to lakes not riverine environments with short travel time.

<sup>8</sup> I do understand that the lowland lakes, for example, are degraded.

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associated rules. In my opinion rule 3.11.5.3 is not in breach of section 70 of the Act, but if I am wrong on that, then rule 3.11.5.2 must be similarly in breach (in fact more so since it expressly provides for a degree of intensification and hence very likely an increase in diffuse discharges and an associated increased effect on aquatic habitat and other values).

6.43 All that aside, to the extent that there is any doubt that the statutory test of section 70 might not be met (and, as I say, I accept that it is beyond my expertise to confirm that), that risk can be readily addressed by ensuring that any discharges associated with a permitted land use is permitted only subject to those section 70 adverse effects not resulting. Indeed, that is precisely what the s42A Report recommends in the form of a new rule 3.11.5.8.

*The diffuse discharge of nitrogen, phosphorus, sediment and or microbial contaminants from farming onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA is a permitted activity, provided the following conditions are met:*

*1. the land use activity associated with the discharge is authorised under Rules 3.11.5.1 to 3.11.5.7; and*

*2. the discharge of a contaminant is managed to ensure that after reasonable mixing it does not give rise to any of the following effects on receiving waters:*

*(a) any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or*

*(b) any conspicuous change in the colour or visual clarity; or*

*(c) the rendering of fresh water unsuitable for consumption by farm animals; or*

*(d) any significant adverse effects on aquatic life.*

6.44 In other words, although the s42A Report justifies a recommendation to dispense with the permitted/CIS rule 3.11.5.3 on the grounds that compliance with section 70 cannot be assured, it provides the simple solution to any legal risk that might exist.

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6.45 I address what my analysis means for Rule 3.11.5.3 and associated policies later in this evidence.

## **7. NITROGEN RISK SCORECARD**

7.1 I discussed Fonterra's proposal to use the NRS in my Block 1 hearing evidence. Without repeating that evidence I simply summarise the proposal by saying that the NRS is a structured and repeatable means of metricising nitrogen loss risk – that is, providing a numeric risk "index" - that could be used in regulatory design so as to avoid the expense and effort of using Overseer modelling. Fonterra's proposal would apply the NRS approach to all low and medium N risk farms but retain the Overseer modelling requirement for all high N risk farms.

7.2 Although promoted by Fonterra, given the nature of dairy farms, I understand that the main beneficiary of the approach would not be dairy but rather drystock farmers.

### **Issue sought to be addressed by the NRP and s42A report**

7.3 There are many issues associated with the use of Overseer that are highlighted by submissions received on PC1 and by the analysis contained in the s42A Report.

7.4 I do not repeat that discussion here. I would note only that the reason the NRS was put forward in the Fonterra submission was to respond to concerns that:

- (a) there would be insufficient capacity to carry out all the Overseer modelling made necessary by the rules on an on-going (annual) basis at the required level of competency;
- (b) significant cost and administrative burden would be imposed on landowners;
- (c) the Council would never have the resource available to audit or review comprehensive Overseer modelling across the Region and hence the potential for "gaming" (or inaccurate modelling) would be high; and

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(d) the fact the annual Overseer reporting was unnecessary and probably uninformative for steady state farming systems.

7.5 In my opinion those concerns are legitimate. The s42A Report also appears to agree with the fundamental point that annual Overseer reporting is unnecessary for many farms (paragraph 106). However, it considers that Fonterra's NRS approach is "overly complicated" and prefers instead an approach that provides farmers with a choice whether to use annual Overseer modelling or to provide certain farm input information annually to Council to demonstrate that key farm parameters that influence N losses are not changing.

7.6 The choice appears to be reflected in the s42A Report's recommended rules in different ways. Rule 3.11.5.2 requires information on stocking numbers, fertiliser use and brought on feed to be supplied to the Council annually as well as access to Overseer information. However, the rule contains no limit on N loss so it is difficult to see what the purpose of supplying the information serves. Section 8 of the recommended rule 3.11.5.2A provides the choice of either meeting the NRP or having a stocking rate <18SU/ha.

7.7 In my opinion, while a move to a single input (stocking rate) metric for low and median intensity farms is one possible planning response to the issues outlined, it is a crude response because stocking rate alone is not a good proxy for N leaching, as explained by Mr Allen. Put simply, N losses can increase while maintaining stocking rates. That occurs because other activities, practices or inputs on the farm change. Based on the evidence of Mr Allen, changes to more intensive grazing practices, increases in arable cropping or fodder crops for winter grazing, introduction of irrigation or changes to fertiliser regimes are all examples of other ways in which N leaching might increase despite a stocking rate remaining constant.

7.8 Accordingly, I am not confident the approach recommended by the s42A authors could pass a section 32 effectiveness test. I consider that evidence on the deviation in N leaching from the NRP rate that could result under this rule (under plausible farming scenarios and across a

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range of physiographic conditions) should be produced and evaluated before any stocking rate limit is adopted as the primary means of limiting N discharges to current levels.

7.9 There are other issues with this approach that would need to be addressed should it be considered further by the Hearing Panel.

(a) The area across which the stocking rate is to be calculated must be defined. In my opinion (and consistent with the Fonterra submission) this area should be limited to the “effective area” of a farm so as to ensure that stocking rates cannot be averaged over bush or forest blocks that might form part of a farming unit. Similarly, the rule needs to foreclose the opportunity for farmers to purchase such land in order to allow increases in stocking rates over the effective area of the farm. The effective area needs to be defined to include only those parts of a farm regularly used for grazing or cropping purposes.

(b) The point in time at which the stocking rate is determined needs to be specified. For example, this may be the winter, summer or peak stocking rate.

(c) It is not clear to me that the approach taken is neutral across farming types. For example, the stock unit approach (using the definition provided) would mean that a low stocked dairy farm (<2 cows per hectare) would not qualify under recommended controlled activity rule 3.11.5.2A and would fall under the RDA rule 3.11.5.4, whereas a bull beef farm at 3 bulls per hectare would qualify under the controlled activity rule (despite ostensibly being a more intensive farming operation).

7.10 While further amendments to the rules might be possible to address the issues raised in (a) to (c) above, I consider that NRS approach outlined in detail in the Fonterra submission should be preferred. The NRS is a more sophisticated tool. While some might describe it as being “complicated”, it is designed to be a good proxy for N leaching. Inevitably that will mean it is more complex in its design than a simple

stocking rate threshold. In my opinion, however, just because it is more complex by design does not make it more complex to use within the planning framework, and certainly not more complex for farmers to understand. Indeed, one of the benefits of the approach is that farmers using the tool can transparently see and understand how adopting certain practices on farm affects N risk.

## **8. FEPS FOR ALL FARMS**

- 8.1 Fonterra's submission on Variation 1 expresses the view that all properties greater than 20ha should have an FEP. I agree with that submission. FEPs are the key planning tool to manage the full suite of diffuse contaminant discharges – particularly those contaminants for which it is difficult (or impossible) to set numeric property scale limits and for which specific actions on farm are key to securing reduction in losses (both short and long term).
- 8.2 As notified rule 3.11.5.2 allows for farms >20ha as a permitted activity provided the N discharge did not increase above the NRP or, N leaching did not exceed 15kg N/ha/yr. No FEP is required. In my opinion, that rule fails to recognise such farms may be modest in terms of their N leaching but significant dischargers of other diffuse contaminants and, accordingly, as a minimum, an FEP should be required to manage P, *E.coli* and sediment loss risk.
- 8.3 The s42A Report amends rule 3.11.5.2 but continues the same basic approach – namely that low intensity farms do not need an FEP, despite the fact that the recommended redrafted permitted activity rule does allow for a 66% increase in stocking rate as noted earlier. To suggest that that may not increase the risk of P, sediment and *E.coli* losses seems to me unsupportable and the fact that no FEP is required to manage that increased risk, unfathomable.
- 8.4 That is especially so when taking into account that the s42A Report (page 51) recommends that stock exclusion is not required on land above a (currently unspecified) degree of slope. Given that stock access to water bodies is likely to be the primary source of *E.coli* in

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many sub-catchments that recommendation is similarly difficult to understand. It would potentially mean no FEP and no stock exclusion and therefore no effective means of controlling key *E.coli*, sediment and P losses from hill country farms.

- 8.5 In my opinion, those matters are illustrative of a wider problem with PC1. That is, as illustrated by Table 1, throughout the catchment as a whole, the biggest exceedances of target attribute states tend to occur in respect of *E.coli*, P and sediment. In other words, although excessive N is a problem, it is often not the problem requiring the greatest step change. Despite that, the rule framework is based around differentiating on the basis of N loss or assumed N loss and, as noted above, the s42A Report's recommendations appear to place less emphasis on *E.coli*, P and sediment than they do on N.

**Table 1 – Percentage reductions required to reach 80 year target (from 10 year target)<sup>9</sup>**

	Nitrogen Indicators (annual medians)			Total phosphorus	<i>E.coli</i> (95% percentile)
	NH-N/L	NO <sup>3</sup> -N/L	TN		
<b>Upper Waikato (Waipapa tailrace)</b>	0%	0%	50%	20%	0%
<b>Middle Waikato (Horotiu Bridge)</b>	0%	0%	19%	41%	33%
<b>Waipa (Whatawhata Bridge)</b>	0%	0%	-	-	85%
<b>Lower Waikato (Tuakau Bridge)</b>	0%	0%	38%	60%	66%

- 8.6 Table 1 shows the need to effectively control P and *E.coli* losses if PC1 is to be effective in meeting its objectives throughout the entire catchment (noting that the upper Waikato FMU presents a somewhat different picture).

<sup>9</sup> The reported percentages are those required between the year 10 and year 80 targets at the lowest measuring point in the main stem of each FMU.



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- 8.7 For those reasons, notwithstanding that rule 3.11.3.2 contains some generic conditions that seek to manage P loss (e.g. controls on cropping and grazing on steeper slopes), I recommend that an FEP be required for all farms larger than 20ha as a means of ensuring all contaminant loss risks bespoke to individual properties are identified and managed.
- 8.8 Although not a matter addressed by the Fonterra submission, I also note my planning opinion that slope is not a good (or workable) indicator of risk associated with stock access to water bodies. That is, risk to water quality associated with stock access does not decrease with increased slope.

## 9. IMPLICATIONS FOR POLICIES

### Policy 1

- 9.1 The s42A Report recommends significant amendments to Policy 1. I do not support all those amendments and consider that the policy has become internally inconsistent, confusing and will be problematic to implement consistently.
- 9.2 Key changes include the following:
- (a) New sub policy a1 proposes requiring *“all farming activities to operate and Good Farming Practice, or better”*. However, confusingly, part b2 implies that GFP will not necessarily be adopted in which case a resource consent will impose *“controls that ensure contaminant losses will be reducing”*.
  - (b) Sub policy "a" enables activities with a low level of contaminant discharge to water bodies. The qualifier *“provided those discharges do not increase”* is proposed to be struck out suggesting that any low contaminant discharger can increase the discharge provided that discharge remains low. No indication of what “low” means is provided but rule 3.11.5.2 suggests that (at least for properties >20 hectares) a low discharger is assumed to be one with a stocking rate <10su/ha. (I have explained above that a low stocking rate does not

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necessarily mean that the activity is or will remain a low contaminant discharger.)

- (c) New sub policy b proposes that those farming activities with moderate to high levels of contaminant loss reduce discharges *“proportionate to the amount of (2016) discharge and the water quality improvements required in the sub-catchment”*.
- (d) Sub policy b1 requires those farms leaching N between the 50<sup>th</sup> and 75<sup>th</sup> percentile to *“demonstrate real and enduring reductions of nitrogen leaching”*.
- (e) Sub policy b1 also requires those leaching N above the 75<sup>th</sup> percentile to reduce leaching N to below the 75<sup>th</sup> percentile.

9.3 While the position for those leaching N above the 75<sup>th</sup> percentile is clear and is supported, I do not consider that the policy test applicable to those farms leaching N below that level is clear, nor is it clear what the requirement is in respect of the other three contaminants.

9.4 Of most concern are the farms leaching N above the 50<sup>th</sup> percentile but below the 75<sup>th</sup> percentile. These must:

- (a) operate at GFP or better (and if they are not doing so, then they must reduce N losses); and
- (b) reduce the N discharge proportionate to their 2016 discharge and proportionate to the improvement required in the sub-catchment. (It is not clear to me what that would be or how that would be determined when assessing individual consent applications); and
- (c) demonstrate real and enduring reductions in N leaching.

9.5 The key question an applicant or consenting officer will want to know is how does one determine the amount of discharge reduction to be required? For example, if a farm in the 50<sup>th</sup>-75<sup>th</sup> percentile is assessed as operating at GFP must they make additional reductions in N losses? If so what test is applied? Is it possible that someone farming at the 76<sup>th</sup>

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percentile would have to make less of a reduction than someone farming at the 60<sup>th</sup> percentile who is required to make "real and enduring" reductions in N loss over and above reductions required to get to GFP?

9.6 In my opinion it is imperative that Policy 1 be clarified. That should be as follows:

- (a) The requirement to farm at GFP should remain in respect of all four diffuse contaminants. However clarification is required as to when "better than GFP" performance is required.
- (b) Part b (requiring "proportionate reductions") should be limited to the contaminants other than N (which is managed under part b1). The concept of "proportionate reductions" needs further explanation.
- (c) Part b1 should be clarified so that:
  - (i) the extent of "real and enduring reductions" relates to that level of reduction that will result from farms operating at GFP; and
  - (ii) the requirement to reduce N losses to below the 75<sup>th</sup> percentile applies over and above any requirement to farm at GFP.

#### Recommendation for Policy 1

9.7 The marked up version below includes those amendments.

**~~Policy 1: Manage-d Diffuse discharge management-s of nitrogen, phosphorus, sediment and microbial pathogens/Te Kaupapa Here 1: Te whakahaere I nga rukenga roha o te hauota, o te pūtūtae-whetū, o te waiparapara me te tukumate ora poto\_~~**

~~Reduce Manage and require reductions in catchment-wide and sub-catchment-wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, by:~~

~~a1. Requiring all farming activities to operate at Good Farming Practice, or better consistent with b and b1 below; and~~

~~a2. Establishing, where possible, a Nitrogen Reference Point for all~~

properties or enterprises; and

- a. Enabling activities with a low level of contaminant discharge to water bodies ~~provided those discharges do not increase~~; and
- b. Requiring farming activities with moderate to high levels of phosphorus, E.coli or sediment contaminant discharge to water bodies to reduce their discharges proportionate to the amount of (2016) discharge and the water quality improvements required in the sub-catchment taking into account both the extent of reductions required to reach the sub-catchment and the level of discharge the farming activity had in 2016 relative to other farming activities in the sub-catchment (with higher dischargers required to make greater reductions); and
  - b1. Calculating the 75th percentile and 50th percentile nitrogen leaching values and requiring farmers with a Nitrogen Reference Point greater than the 75th percentile to reduce nitrogen loss to below the 75th percentile and farmers with a Nitrogen Reference Point between the 50th and 75th percentile to demonstrate real and enduring reductions of nitrogen leaching commensurate with them operating at Good Farming Practice, with resource consents specifying an amount of reduction or changes to practices required to take place; and
  - b2. Where Good Farming Practices are not adopted at the time a consent application is made, to specify controls in a resource consent that ensures contaminant losses will be reducing;
  - b3. Except as provided for in Policies [1(a) and] 16, generally granting only those land use and discharge consent applications that demonstrate clear and enduring reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens; and
  - b4. Except as provided for in Policies [1(a) and] Policy 16, generally not granting land use consent applications that involve a change in the use of the land, or an increase in the intensity of the use of land, unless the application demonstrates clear and enduring reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens; and
- c. Progressively excluding cattle, horses, deer and pigs from rivers, streams, drains, wetlands and lakes.

### Good Farming Practice

- 9.8 It is common ground that “good farming practice” is not a black and white metric. That is, there is not a long list of practices that will be

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universally applicable and which you can be judged as either doing or not doing. Determining what is GFP on any particular property requires:

- (a) undertaking a risk assessment of each farm to understand what features and practices are having what effect or posing a potential risk of effect, and identifying how those farm-specific risks could be managed. This will generally lead to identification of highly farm-specific actions. Undertaking such an assessment is the first “principle” of the 21 published industry agreed principles as referenced in the s42A Report;
- (b) the application of other general principles of GFP to the extent they are relevant to the farm system (the principles cover issues such as effluent management and irrigation which will not be relevant on all farms); and
- (c) applying, as appropriate, particular industry codes of practice to assessing adequacy of infrastructure and practices and in designing solutions to generic problems and risks.

9.9 The s42A Report is not clear and consistent on what it means by GFP and how what GFP is on any particular farm will be determined. The process described in the paper included in the s42A Report at page 61 (prepared by Mr Dragten) refers to applying the 21 GFP principles. However, the definition of GFP currently refers to undertaking “industry agreed and approved practices” which seems to me a different concept than applying principles or undertaking farm-specific contaminant loss risk assessment. The definition of GFP is greyed out in the “tracked change” version of PC1 appended to the s42A Report and hence I understand it will be addressed as part of a later hearing.

9.10 That being the case, I simply indicate that in my opinion the definition needs amendment for the reasons given and that it is a matter I will likely return to at a later hearing.

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## 10. POLICY 8

10.1 Policy 8 addresses the question of prioritisation of implementation. Fonterra's submission states that, given whole of catchment objectives, there is no environmental reason why some sub catchments should be allowed to wait 10 years before FEPs are put in place.

10.2 The s42A Report suggests that the approach means that effort will be made in those areas where water quality is particularly degraded. The section 32 report similarly mentions that prioritisation is related to the gaps between current water quality and the desired water quality. I have not examined in detail the modelling undertaken in that regard but I have considered the gaps between the current *E.coli* state and the prioritisation and can find no obvious relationship. For example:

- (a) In the Lower Waikato FMU *E.coli* contamination in the Ohaeroa Stream and Mangatawhiri River is 5125 and 5615 *E.coli*/100mL (95<sup>th</sup> percentile) respectively. (The 80-year target is 540 *E.coli*/100mL). These levels are some of the very highest in the FMU. Yet these are both sub catchments are identified as Priority 3 sub catchments.
- (b) Also in the Lower Waikato FMU, the Whangapae Stream and the Whangamarino River have 95<sup>th</sup> percentile *E.coli* levels of just 589 and 668 *E.coli*/100mL respectively (i.e. they almost comply with the 80 year target now) yet both those sub catchments are identified as Priority 1.
- (c) In the Middle Waikato FMU, the Mangonua Stream has an *E.coli* contamination of 7200 *E.coli*/100mL. That is one of the very highest in the Catchment. Again, the 80-year target level is 540. This sub catchment is also identified as Priority 3. In the same FMU the Karapiro stream has 4960 *E.coli*/100mL but is also identified as Priority 3. Also, in the same FMU the Waikato River (at Horotiu Bridge) sub catchment has a comparatively modest *E.coli* count of 800 *E.coli*/100mL yet is identified as Priority 1.

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- (d) In the Waipa FMU the Mangapiko Stream has is the second most contaminated stream in the Waikato catchment for *E.coli* (7800 *E.coli*/100mL). Yet again, it is identified as Priority 3.
- 10.3 This suggests to me that the modelling undertaken to carry out the prioritisation did not given particular weight to *E.coli* as a contaminant. Given the emphasis on swimmability in the NPSFM that seems difficult to support. More particularly it does seem to undermine the assertion made in the s42 Report that prioritisation will allow effort to be expended where water quality most degraded. Clearly that depends on what is meant by "most degraded". In my opinion, to the extent to which sub-catchment prioritisation affects the timing of stock exclusion obligations (and hence the pace of improvements in *E.coli* contamination), the current approach is difficult to justify.
- 10.4 The s42A Report appears to have interpreted Fonterra's submission as suggesting that Fonterra seeks that dairying is prioritised for FEP above other uses. That is not my understanding of Fonterra's submission and as confirmed by Mr Allen, that is not Fonterra's position.
- 10.5 I accept that the PC1 needs to be designed with ability to implement in mind and hence I agree that requiring every farm everywhere to prepare an FEP at the same time may not be practical.
- 10.6 I suggest that an appropriate solution is to retain sub-catchment prioritisation but that stock exclusion be decoupled from the prioritisation of sub-catchments so that those sub-catchments seriously degraded by microbial contamination do not have wait until 2026 for stock exclusion obligations to apply.
- 10.7 In my opinion there is no basis for prioritising dairying (but not other activities) regardless of sub-catchment. I also note that without a CIS Fonterra will have no oversight of the regulatory responsibilities for individual farmers (including when a farmer prepares an FEP) and hence the suggestion made in the s42A Report that dairying is better prepared than other sectors may not prove to be correct.

## 11. IMPLICATIONS FOR RULES

11.1 In Attachment 1 I set out the tracked change version of the rule rules as was included in Fonterra's submission on Variation 1. This version of the rules has been prepared to give effect to the NRS. They remain in my opinion, the preferable planning option for the reasons set out above.

## 12. OVERVIEW OF FONTERRA'S SUBMISSION ON ITS MANUFACTURING (POINT SOURCE DISCHARGE) INTERESTS

### Background

12.1 Fonterra point source discharges are outlined by Ms Buckley for Fonterra. In short, there are point source discharges of process wastewater to water and/or to land variously from Fonterra's Te Rapa, Te Awamutu, Hautapu, Lichfield, Reporoa dairy processing facilities. There is also discharge of treated sewage wastewater to land at Lichfield, Hautapu and Reporoa. Wastewater treatment plant solids, such as dissolved air flotation (**DAF**) sludges are discharged to land via a truck spreading operation (similar to the spreading of fertiliser) or compost. All of these discharge activities are authorised by existing consents, as set out in Ms Buckley's evidence.

12.2 In his evidence, Dr Neale (expert science witness for Fonterra) describes two studies of the contribution of discharges from Fonterra's manufacturing facilities to N and P loads in the river

12.3 A key conclusion is that, based on the Regional Council (Vant 2014) study:

(a) Points source discharge contribute 7% of the total catchment N load and a 18% of the total P load.

(b) Three of Fonterra's Waikato catchment manufacturing facilities with direct discharges to water collectively contribute 0.38% of the catchment's N load and 1.69% of the catchment's P load.

12.4 Fonterra's own assessment of the contribution of all five of is manufacturing point source discharges (including those that discharge to



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land) indicates that Fonterra's manufacturing discharges are responsible for 0.82% of the total catchment N load and 1.83% of the total catchment P load. In other words while the discharges are individually large (relative to individual farms), in fact they are a very small contributor to the catchment's overall nutrient loads.

12.5 Dr Neale also shows that N load contribution from four sites (Te Rapa, Te Awamutu, Reporoa and Hautapu) has shown a statistically significant decrease over the past 15 years. Discharges of P have decreased in Hautapu, increased at Lichfield and at the other three sites have been constant (not increased over the past 15 years).

12.6 That is important background for reasons discussed later.

**Policy 10 – Regionally significant infrastructure and industry**

12.7 Policy 10 gives policy support to the continued operation of regionally significant industry when deciding point source discharge consent applications.

12.8 Fonterra's submission supports this policy. I agree that the policy is necessary and appropriate to give effect to the RPS. There are, however, two issues that require attention.

12.9 First, Fonterra's submission also seeks that a definition of "*regionally significant industry*" be included in the definitions section. The s42A Report (para 1072) suggests that definition from the RPS be used. I agree that that is the most appropriate approach at this point. It would be difficult for the Hearing Panel to determine an exclusive list of activities in light of an absence of comprehensive evidence on the benefits of different industries. However, if the Hearings Panel is mindful to include a list of infrastructure and activities in a definition then Fonterra's five processing facilities should be included. In my opinion, Ms Buckley's evidence clearly demonstrates that in terms of processing capacity and employment, Fonterra's facilities are (at least) regionally significant.

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- 12.10 Second, the Fonterra submission notes a concern that Policy 10 could be read on its own and an interpretation made that Policies 11, 12 and 13 do not apply to regionally significant industry – that is, that there was a broadly more permissive approach to such discharges. The Fonterra submission says that both such a policy outcome and such an interpretation would be wrong, and I agree with that.
- 12.11 The s42A Report adopts that view that Policy 10 should not be read in isolation according to normal rules of plan interpretation. While I agree with that view, in my opinion it would be wise to prevent any potential misinterpretation and by adding the additional words proposed in the Fonterra submission.
- 12.12 Finally, I just record my agreement with the s42A Report that it would not be appropriate to expand Policy 10 so as to encompass new and additional infrastructure and industrial facilities. Those activities should be subject to general policies if the planning regime is to have integrity. However, it is important to note that the policy provides for the continued operation of the regionally significant *industry and infrastructure*. It does not provide for the continuation of the *discharge* as it might be now. The nature, scale and location of discharge may well have to change to continue to provide for the industry or infrastructure and give effect to other objectives and policies of the plan.

**Recommendation: Policy 10**

- 12.13 Amend Policy 10 as follows:

***Policy 10: Provide for point source discharges from activities of regional significance***

*When deciding resource consent applications for **point source discharges** of nitrogen, phosphorus, sediment and **microbial pathogens** to water or onto or into land, subject to Policy 11 and Policy 12 provide for the:*

- a) *Continued operation of regionally significant infrastructure;*  
*and*
- b) *Continued operation of regionally significant industry.*

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**13. POLICY 11 – BEST PRACTICABLE OPTION AND OFF-SETTING**

13.1 As notified, Policy 11 provides, in respect of point source discharges, for both the use of BPO approach and for the use of offsetting.

13.2 The Fonterra submission supports a BPO approach but makes two main points:

(a) that the concepts of BPO and offsetting were fundamentally different and that conflating to two into a single policy is potentially confusing; and

(b) that the relationship between the two approaches (i.e. when BPO would not be regarded as sufficient an offsetting required) was not clear.

13.3 The s42A Report:

(a) agrees that the policy should be split into two parts (albeit kept together under “Policy 11”); and

(b) recommends clarifying the relationship between the BPO and off-setting by suggesting that offsetting will be encouraged where any adverse effects cannot be reasonably avoided or reasonably mitigated.

**Relationship between BPO and offsetting**

13.4 In my opinion, the amendment recommended by the s42A Report provides little clarification in relation to point 13.2 (b) above because if an effect could be "reasonably avoided" or "reasonably mitigated" it would be so under the BPO approach (depending perhaps on how "reasonably" is defined). Hence, after BPO is adopted the only effects that should be apparent are those that cannot be reasonably avoided or reasonably mitigated (taking into account the factors relevant to determining the BPO). In other words, the recommended policy appears to me to require offsetting in every instance where there will be adverse effects notwithstanding the adoption of BPO. To the extent that any

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contaminant discharge might be said to have an adverse effect the policy would appear to require off-setting in every case.

13.5 In my opinion that is not reasonable or justified. Off-setting should be considered when the point source would:

(a) *increase* the contaminant load at the point of discharge (and downstream of that discharge); and

(b) in the case of an existing discharge, *not result in a decrease* in the contaminant load to a degree proportionate the reduction required across the sub-catchment to meet the Table 3.11-1 target attribute states.

#### **When offsetting is not appropriate**

13.6 The other important point is to clarify when offsetting would *not* be an appropriate solution to a point source discharge. The notified version of Policy 11 suggested that ought to be where there was a "*significant toxic adverse effect at the point source location*". I understand that some submitters considered that test insufficiently stringent and the s42A Report accordingly adopts the Fish and Game proposed wording of "*significant or toxic adverse effect ...*".

13.7 In my opinion that change goes too far. It would mean that only effects that are not significant at the point of discharge could be offset. In my opinion, it would be better to use the wording of section 70 of the Act to refer to "*significant adverse effects on aquatic life*" at the point source discharge location.

#### **Up-stream offsetting**

13.8 The s42A Report notes that some submitters seek that the offset provision be amended so that an offset may only occur within the same sub-catchment. The 42A Report itself records that officers consider that "*additional direction toward the same sub-catchment is warranted*". Despite that conclusion I can find no such additional direction recommended in the tracked changed version.

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- 13.9 In my opinion, the wording of sub policy 11c in that regard is appropriate. In many instances an offset in a sub-catchment (or FMU) up-stream of the discharge point will produce a greater benefit than one in the sub-catchment where the discharge occurs. That is explained by Dr Neale. In simple terms, that is because a longer stretch of river will experience the reduction in contaminant load. I accept that that may not be the case if a point source discharge is in an upper reach of a tributary and the offset is on the main stem upstream of the confluence of the tributary (in which case the offset will not offset the effect in the tributary). However, most large industrial or municipal point source discharges are on the main stem and any offset upstream will produce a benefit and the further upstream that greater the benefit. For that reason, Policy 11c should remain as proposed although the word “preference” should be deleted because what is preferable for the river will depend on the circumstances as explained above.

#### **Currency of BPO**

- 13.10 Except for the matters raised above, Fonterra’s submission supports Policy 11. An amendment to the policy that has been recommended by the s42A Report is, however, in my opinion problematic.
- 13.11 As notified, Policy 11 requires point source dischargers to adopt the BPO “at the time a resource consent application is decided”. I understand that to mean that a point source discharger must adopt what is determined as BPO at the time of the consent application. That is, it is not required to speculate on what BPO might be in 5, 10 or 20 years ahead.
- 13.12 That is an important principle. What is the BPO will change over time as technology evolves and the cost of various practices and technologies change in response to a variety of market factors. However, it would be wrong, in my opinion, for the regulator or the applicant to try and predict what those changes might be and require, by way of conditions, that practices and/or technologies that are not currently the BPO are adopted now or scheduled for introduction at some future point in time.

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13.13 The RMA provides a mechanism in section 128 (1) (a) by which a consent can be reviewed (provided a condition is placed on the consent) to require a holder of a discharge permit to adopt the best practicable option. Many of Fonterra's consents also have, quite separately from the review condition, a requirement to undertake a "technology review" of treatment options at certain points in the consent term. There is no need for a consent to have to attempt to predict what that option might be ahead of time.

13.14 Hence, it is important that Policy 11 is clear that the BPO that is to be adopted is the practice and/or technology that is BPO as and when the application is determined by the regional council.

**Recommendation: Policy 11**

13.15 Amend Policy 11 as follows.

***Policy 11: Application of Best Practicable Option and mitigation or offset of effects to point source discharges***

*Require any person undertaking a point source discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato and Waipa River catchments to, as a minimum, adopt the Best Practicable Option\*, as identified at the time a resource consent application is determined, to avoid or mitigate the adverse effects of the discharge. ~~at the time a resource consent is decided.~~*

*Where ~~it is not practicable to avoid or mitigate all~~, despite the adoption of Best Practicable Option, there remain significant residual effects, it is encouraged that an offset measure ~~may~~ be proposed in an alternative location or locations to the point source discharge, for the purpose of ensuring positive effects on the environment to lessen any residual adverse effects of the discharge(s) that will or may result from allowing the activity provided that the:*

- a. Primary discharge does not result in the discharge having either significant adverse effects on aquatic life or toxic adverse effects at the point of discharge location; and*

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- b. Offset measure is for the same contaminant; and
- c. Offset measure occurs preferably upstream within the same sub-catchment in which the primary discharge occurs and if this is not practicable, then upstream within the same Freshwater Management Unit<sup>^</sup> or a Freshwater Management Unit<sup>^</sup> located upstream, and
- d. remains in place for the duration of the consent and is secured by consent condition or another legally binding mechanism.

For the purposes of this policy, a significant residual effect is:

- i. in respect of an existing discharge, the extent to which any replacement discharge or discharges fails to reduce the contaminant load of that discharge proportionate to the decrease required to achieve the short-term attribute states in Table 3.11-1 or the progression towards the 80-year water quality attribute states in Table 3.11-1;
- ii. In respect of a new discharge, the extent to which any new discharge will add E Coli, sediment, N or P contaminants to either the Waikato River or Waipa River catchments.

#### 14. POLICY 12

- 14.1 Fonterra's submission supports Policy 12. It makes some requests for change, but these are focussed on minor points of clarification.
- 14.2 The s42A Report addresses most of the points raised by Fonterra with the exception of sub policy c.

#### **Points source discharges and the meeting of attribute states**

- 14.3 Sub policy c refers to mitigation actions being staged to "to meet the water quality attributes states..". Fonterra's submission opposes the reference to "meet" and suggested that the words "contribute to" be substituted. I agree with that submission.
- 14.4 The evidence of Dr Neale demonstrates that the contribution of point source discharges to the attribute states of the Waikato and Waipa River

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catchments is very small. No mitigation (no matter how significant) of a point source discharge can result in the attribute state of Table 3.11-1 being “met”. What can be done is to impose mitigations (particularly on replacement point source consents) that *contribute to* the attribute states being met by making an appropriate proportional reduction in contaminants discharge. In my opinion, the Fonterra submission is correct to seek that sub policy c be amended to avoid any future misunderstanding.

#### **Diminishing return on investment**

- 14.5 The s42A Report recommends deleting sub policy d. That part of the policy recognises that there can be a diminishing return on investment in treatment plant upgrades. That is, while you get good return (benefit for the river) from initial upgrades, securing the very last possible contaminant reductions from treatment becomes very expensive (due to the technology and operating costs involved).
- 14.6 In my experience, that phenomenon is a well-accepted principle of investment in effects management generally but is particularly apparent in effluent/water treatment processes.
- 14.7 What it means is that there often comes a point when seeking further treatment of a point source discharge becomes a very expensive means of securing a reduction in contaminant load in a river. Inevitably there will be other cheaper options available in the wider catchment (or greater benefit possible for the same level of investment) and, to the extent that further reductions are necessary and justifiable, the more economically rational policy approach is to allow the point source discharger to achieve the necessary reductions through means other than further treatment of their particular point source discharge. That is where off-setting is important.
- 14.8 In my opinion, it is appropriate that Policy 11 recognises this phenomenon. In my opinion this should be linked with the requirement for off-setting.



**Recommendation: Policy 12**

14.9 Amend Policy 12 as follows.

**Policy 12: ~~Additional considerations for~~ Considering point source discharges in relation to water quality targets**

~~When deciding a resource consent application, c~~Consider the contribution made by a point source discharge to the nitrogen, phosphorus, sediment and microbial pathogen catchment loads and the impact of that contribution on the ~~likely~~ achievement of the short term ~~water quality attribute states^ targets^~~ in Table 3.11-1 ~~Objective 3~~ or the progression towards the 80-year ~~water quality attribute states^ targets^ in Objective 1~~ Table 3.11-1, taking into account:

- a. The relative proportion of nitrogen, phosphorus, sediment or microbial pathogens that the particular point source discharge contributes to the catchment load and the net change proposed in that contribution; and
- b. Past ~~technology~~ upgrades undertaken to ~~model, monitor and~~ reduce the discharge of nitrogen, phosphorus, sediment or microbial pathogens within the previous consent term; and
- c. ~~The ability~~ Whether it is appropriate to stage future mitigation actions to allow investment costs to be spread over time and to ~~meet~~ contribute to the water quality ~~attribute states^ targets^~~ specified above; ~~and~~
- d. The diminishing return on investment in treatment plant upgrades in respect of any resultant reduction in nitrogen, phosphorus, sediment or microbial pathogens when treatment plant processes are already achieving a high level of contaminant reduction through the application of the Best Practicable Option\* and the nature of any offsetting of effects that has been proposed by the applicant in accordance with Policy 11.

**15. POLICY 13 – POINT SOURCE DISCHARGE CONSENT DURATION**

15.1 Fonterra's submission broadly supports Policy 13. The key amendments recommended by the s42A Report would:

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- (a) remove the reference to providing a consent term exceeding 25 years (when the discharge is consistent with the policy approach) and replace it with a more general reference to providing "*a longer consent duration*"; and
  - (b) deletion of reference to demonstrating that policy approaches of Policies 11 and 12 will be met and replacement with reference to demonstrating the discharge "*is consistent with achieving water quality attribute states set out in Table 3.11-1*".
- 15.2 In principle I support the recommended changes in part. However, the wording referred to in (b) above remains unclear in my opinion. In particular, I consider that there will likely be on-going debate about whether it means that point source discharges will need to contribute proportionately to the reductions required to achieve the sub catchment attribute states (i.e. if a 10% reduction is required per decade for a particular contaminant then the point source discharge will have to make a similar reduction). Or, if that is not necessarily required, in what circumstances that may not be strictly required.
- 15.3 I also consider that signalling that longer term consents will be available for long term commitment to contaminant loss reduction is important to provide the appropriate level of certainty to resource users.
- 15.4 The s42A Report does not appear to recognise that Section 1.2.4 of the Regional Plan already contains Policy 6 which states: "*When considering a consent duration, there will be a presumption for the duration applied for unless an analysis of the case indicates that a different duration is more appropriate having regard to case law, good practice guidelines, the potential environmental risks and any uncertainty in granting the consent.*"
- 15.5 This policy creates the presumption that what is sought by way of consent duration is what ought to be granted by the Council unless there is good reason to grant a consent for a lesser duration. In my opinion, industry is more likely to invest the necessary capital in treatment systems that can achieve meaningful reductions in contaminant loads if

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there is long term operating certainty. By contrast, shorter term consents can lead to investment deferral.

15.6 Accordingly, I consider that Policy 13 needs to make three points clearly:

- (a) that longer term consents (by which I mean at least 25 years) will be considered if certain conditions are met;
- (b) that one of the key conditions is that the applicant can demonstrate that throughout the term of the consent the discharge will keep pace with the reductions required to reach targets (ie. step down in contaminant discharge in proportion to reducing in stream target loads); and
- (c) that in considering the need to strictly apply the test outlined in (b) above, account will be taken on the level of existing wastewater treatment, past investment in treatment technology and quality of discharge.

15.7 The last point is particularly important because in the Waikato catchment, as elsewhere, there will be a range of levels of investment within and between sectors in the treatment technologies already in place - and a corresponding range of quality of discharge. Accordingly, it will be important the policies do not treat every discharge the same. The policy framework (including Policy 13) clearly needs to ensure poor quality discharges improve but the same policies ought not penalise already "good quality" dischargers by imposing a uniform expectation of the proportion of improvement required. Clearly, the better the quality of discharge at the "starting point" the more difficult and more expensive making improvement will be, making uniform expectations of reductions inequitable.

15.8 I note also the importance of giving some indication of what a "long term" consent might be for the purpose of point source discharges. Without that there is little certainty. It is of some relevance to note that section 3.3 (Water Takes) of the Policy 15 of the Regional Plan provides such a guide for water take consents and sets out the activities (which include "large scale capital intensive industrial facilities") that may

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receive a consent duration above that level. It also includes the circumstances when consents might be granted for shorter durations.

**Recommendation: Policy 13**

15.9 For the reasons set out above I recommend amending Policy 13 as follows.

***Policy 13: Point sources consent duration***

*When determining an appropriate duration for any point source discharge consent granted consider the following matters:*

- a. *The appropriateness of a longer consent duration A consent term exceeding 25 years, that reflects the commitment made to achieving reductions in contaminant losses where the applicant demonstrates that the discharge is that contribute to consistent with achieving the water quality attribute states set out in Table 3.11-1 at a rate and in proportion to the scale and timing of reductions required across the sub catchment. the approaches set out will be met; and/or*
- b. *The magnitude and significance of the investment made or proposed to be made in contaminant reduction measures and any resultant improvements in the receiving water quality that have been made of will be achieved; and*
- c. *The need to provide appropriate certainty of investment where contaminant reduction measures are proposed (including investment in treatment plant upgrades or land based application technology).*
- d. *Whether, considering the matters listed in a. to c. above, a long term consent (at least 25 years) is appropriate.*

**16. RELATIONSHIP BETWEEN DIFFUSE AND POINT SOURCE DISCHARGE RULES**

16.1 Three of Fonterra's Waikato catchment manufacturing sites discharge process wastewater to land. That is undertaken by piping treated wastewater to nearby farms and irrigating the wastewater to pasture.

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Some of those farms are owned by Fonterra and in other cases the disposal farms are owned by a third party (i.e. private dairy farmer) who take the wastewater under contract to Fonterra. The wastewater is of benefit to farmers since it is a source of irrigation water during summer but also a source of nutrients and acts as a fertiliser replacement (ie. means that the farmer may not need to apply fertiliser - or at least not the same amount of fertiliser - to achieve target pasture growth).

- 16.2 In all cases, Fonterra holds a discharge consent for the wastewater discharge to land (even where it occurs on a third party farm). Such consents are generally part of the suite of consents held for the manufacturing site. These discharge consents typically include conditions that specify a maximum loading of both N and P. These conditions also require the development and implementation of a management plan to ensure that the discharge of industrial process wastewater to farmland (third-party or Fonterra owned) occurs in a sustainable and agronomic manner.
- 16.3 In most cases, a farming activity continues on, and is an integral part of those disposal farms. As currently drafted, PC1 would capture that activity as “farming” under Rules 3.11.1-3.11.4 and hence may also require a consent under one of those rules and have a N loss limit apply.
- 16.4 In addition to this type of discharge, a Fonterra subsidiary, Dairyfert Limited holds a resource consent to dispose of dairy manufacturing wastewater treatment plant solids, and other dairy liquids anywhere in the Waikato Region, in accordance with the conditions of that consent. The discharges under this consent are by way of mobile slurry tankers.
- 16.5 Again, this slurry discharge acts as a fertiliser replacement, and is undertaken in conjunction with an underlying farming land use that would be captured by PC1’s farming land use rules. The nitrogen loading of the applied sludge would be captured in the landowner’s nutrient budget as a fertiliser substitute.
- 16.6 A number of complex questions arise from this situation but in simple terms, PC1 would regulate the land use activity of farming – including

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managing land use practices that affect the nature and scale of diffuse discharges. On the other hand, consents are already held for wastewater disposal farms for the discharge to the land – managed in order to limit the loss of nutrients from land to water. In other words, at least in part, the land use rules of PC1 would appear to duplicate (and potentially conflict with) an authorisation already held (or which may need to be applied for in the future if there is a change or enlargement of the disposal area). I accept, however, that that will not be fully the case since there will be matters controlled by the land use rules that will not be addressed by the existing (or future) process wastewater discharge consents. That makes the interface between these rules “messy”.

16.7 From a planning perspective some matters may require clarification. These relate to the following questions.

- (a) Should the nutrient component of the process wastewater be part of the farm’s NRP? And, if it is:
  - (i) How does PC1 manage the situation where process wastewater discharge may need to shift location to another farm (due to operational or contractual factors)?
  - (ii) How do land use rules require a reduction in N to below the 75<sup>th</sup> percentile if a discharge consent has been granted enabling the elevated N discharge?
- (b) Should the farming activity undertaken on a process wastewater disposal farm be “farming” for the purpose of PC1?
- (c) To the extent that the underlying rural activity undertaken on a process wastewater disposal farm is “farming” for the purposes of PC1, how can we ensure consistency between the requirements of the two authorisations and, in particular, integration of the FEP required by PC1 and the management plan typically required under any discharge consent? (Note that Fonterra’s submission seeks that management plans associated with process wastewater irrigation be deemed to be

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FEPs if they address all relevant matters in Section A of Schedule 1. In my opinion that is unlikely to address the issue effectively since management plans will not address all the Schedule 1 matters).

- 16.8 Fonterra's submission focuses on the last of these issues but in fact there is a series of much broader planning issues at stake.

**Proposed solution to better integrate land use and point source discharges**

- 16.9 In order to resolve the uncertainty and complex implementation challenges associated with the situation described above, I propose that PC1 be amended as follows.

*Discharge consent only for disposal farms without livestock*

- 16.10 If the land use activity underlying process wastewater disposal is "cut and carry" (i.e. not livestock) then the primary purpose of that farm should be regarded as wastewater disposal and it should not be caught by land use rules (i.e. cut and carry can be considered ancillary to the primary purpose and there would be no need to separately control land use though PC1's rules). That can be achieved by changing definition of "farming" to add to the list of exclusions. Nutrient loading on those properties (and hence diffuse nutrient loss risk) would be managed solely by the discharge consent as required under discretionary activity discharge rule 3.5.4.5) of the Regional Plan (not being part of PC1). That is justified on the basis that the complications created by having livestock (in terms of other sources of contaminant loss) do not arise and hence the discretionary discharge consent is an administratively efficient response to the risk presented.

- 16.11 The amendment to the definition of "farming" would be:

**Farming activities:** *For the purposes of Chapter 3.11, the grazing of animals or the growing of produce, including crops, commercial vegetable production and orchard produce but does not include:*

- a. *planted production forest; or*

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- b. *the growing of crops (including pasture for "cut and carry") on land irrigated by consented industrial or municipal wastewater discharges; or*
- c. *production or growing of produce undertaken entirely within a building; or*
- d. *production or growing produce for consumption by the occupier of the property or their family.*

*Providing flexibility in wastewater disposal in an environment of fixed NRPs*

- 16.12 The s42A Report recommends separating the authorisation of the section 9 land use from the section 15 diffuse discharge. In doing this, careful attention will need to be paid to:
- (a) the overlap between the discharge of diffuse contaminants from land and the discharge of the point source process wastewater to land (given that some of the contaminants are one and the same); and
  - (b) that separate section 15 discharge consents will be held for process wastewater disposal farms and that there may be a need to move or transfer those consents from time to time.
- 16.13 It seems likely that difficulties arise due to the inflexibility of NRPs (which fix to land) relative to the discharge consent that may move location. While there are potentially many complex ways this issue could be managed, in my opinion, the simplest way is to allow for discharge consents (and transfers) to explicitly consider net changes to sub catchment load rather than being fixated on the land use rules' NRP.
- 16.14 The insertion of the words "and the net change proposed in that contribution" into Policy 12 as proposed in paragraph 14.9 would achieve that end.

*Aligning FEPs and management plans*

- 16.15 Further to the above issue, to ensure that a single integrated management plan exists for all process wastewater disposal farms Schedule 1 should be amended to provide for any existing management



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plan to be included within the FEP and additional matters to be included within the FEP only insofar as they are necessary to ensure all the matters specified in Schedule 1 Part 1A that are not addressed in any existing management plan are addressed.

16.16 The necessary amendment to Schedule 1 will be addressed in Block 3 evidence.

A handwritten signature in blue ink, appearing to read 'G. Willis', is positioned above the printed name and date.

**Gerard Matthew Willis**  
**3 May 2019**

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## Appendix 1 – Tracked Changes to Rule to give effect to Fonterra’s Nitrogen Scorecard proposal

*Note changes are to PC1 as notified and do not include amendments recommended in the s42A Report*

### Rule 3.11.5.1 - Permitted Activity Rule – Small low risk farming activities

The use of land for farming activities (excluding commercial vegetable production) and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a permitted activity subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; ~~and~~
2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; ~~and~~  
~~Either:~~
3. The property area is less than or equal to 4.1 hectares; and
4. The farming activities do not form part of an enterprise being undertaken on more than one property; and
5. Less than 25% of the feed consumed by livestock on the property is imported on to the property.

~~Where the property area is greater than 4.1 hectares:~~

- ~~5. For grazed land, the stocking rate of the land is less than 6 stock units per hectare; and~~
- ~~6. No arable cropping occurs; and~~
- ~~7. The farming activities do not form part of an enterprise being undertaken on more than one property; and~~ ~~Where the property area is greater than 20 hectares:~~

### Rule 3.11.5.2 - Permitted Activity Rule – ~~Other farming activities~~ Small and/or low to medium nitrogen leaching risk farming activities

The use of land for farming activities (excluding commercial vegetable production) and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water that is not permitted under Rule 3.11.5.1 where the property area greater than 4.1 hectares, and has more than 6 stock units per hectare or is used for arable cropping, is a permitted activity subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; ~~and~~
2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C and Conditions 3(c) and 4(f) of this Rule; ~~and~~
3. ~~Where~~ The property area is less than or equal to 20 hectares; and
  - a. The farming activities do not form part of an enterprise being undertaken on more than one property; ~~and~~

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- b. Less than 25% of the feed consumed by any livestock on the property is imported onto the property;
  - b.c. Where the land is:
    - i. used for grazing livestock, the stocking rate of the land is no greater than the stocking rate of the land at 22 October 2016; or
    - ii. not used for grazing livestock, the land use has the same or lower diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens as the land use at 22 October 2016; ~~and~~
  - e.d. Upon request, the landowner shall obtain and provide to the Waikato Regional Council independent verification from a Certified Farm Environment Planner that the use of land is compliant with either ~~b)c~~(i) or ~~b)c~~(ii) above; ~~and~~
  - d.e. Upon request from the Waikato Regional Council, a description of the current land use activities shall be provided to the Council; ~~and~~
  - e.f. Where the property or enterprise contains any of the water bodies listed in Schedule C, new fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains); or
4. ~~Where~~The property or enterprise has an area is greater than 20 hectares and:
- a. The peak stocking rate is less than 10 stock units per hectare;
  - b. Less than 5% of the property is cultivated in any one year;
  - c. No winter forage crops are grazed in situ.
  - d. A reference level of nitrogen leaching, is provided to the Waikato Regional Council in the form of either:
    - (i) An Nitrogen Reference Point calculated in accordance with Schedule B;
    - or
    - (ii) A Nitrogen Risk Scorecard Reference Grade determined in accordance with Schedule BA.
  - e. Nitrogen leaching from the property or enterprise does not exceed the reference level of nitrogen leaching for the property or enterprise submitted to the Waikato Regional Council in accordance with condition 4 d, as demonstrated by either:
    - (i) the three-year rolling average as submitted to the Waikato Regional Council by 1 July each year; or
    - (ii) an annual Nitrogen Risk Scorecard Assessment undertaken in accordance with Schedule BA and submitted to the Waikato Regional Council by 1 July each year.
  - f. A Farm Environment Plan is prepared in accordance with Schedule 1, is approved by a Certified Farm Environment Planner, and is provided to the Waikato Regional Council by 1 July 2023;
  - g. The use of land is undertaken in accordance with the actions and timeframes specified in the Farm Environment Plan;
  - h. The Farm Environment Plan provided under Condition 4f may be amended in accordance with the procedure set out in Schedule 1 and the use of land shall thereafter be undertaken in accordance with the amended plan;

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- i. [A copy of the Farm Environment Plan amended in accordance with condition 4h shall be provided to the Waikato Regional Council within 30 working days of the date of its amendment;](#)
- j. Where the property or enterprise contains any of the water bodies listed in Schedule C:
  - i. There shall be no cultivation within 5 metres of the bed of the water body; and
  - ii. New fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains); [or](#)

5. The property or enterprise is used for arable cropping; and

- a. [No part of the property is used for grazing livestock](#)
- b. [Arable cropping does not occur within 3 meters of any waterbody](#)
- c. [No part of the property or enterprise over 15 degrees slope is cultivated](#)
- d. [Upon request, the landowner shall obtain and provide to the Council independent verification from a Certified Farm Environment Planner that the use of land is compliant with 5 a to d above.](#)
- e. [A reference level of nitrogen leaching and associated data, is provided to the Waikato Regional Council at the date of registration in the form of either:](#)
  - [\(i\) A Nitrogen Reference Point calculated in accordance with Schedule B; or](#)
  - [\(ii\) A Nitrogen Risk Scorecard Grade determined in accordance with Schedule BA.](#)
- f. [Nitrogen leaching from the property or enterprise does not exceed the reference level of nitrogen leaching for the property or enterprise submitted to the Waikato Regional Council in accordance with condition 4 d, as demonstrated by either:](#)
  - [\(i\) the three-year rolling average as calculated each year and submitted to the Waikato Regional Council; or](#)
  - [\(ii\) an annual Nitrogen Risk Scorecard Assessment undertaken in accordance with Schedule BA and submitted to the Waikato Regional Council by 1 July each year.](#)
- g. [A Farm Environment Plan is prepared in accordance with Schedule 1, is approved by a Certified Farm Environment Planner, and is provided to the Waikato Regional Council by 1 July 2023;](#)
- h. [The use of land is undertaken in accordance with the actions and timeframes specified in the Farm Environment Plan;](#)
- i. [The Farm Environment Plan provided under Condition 4g may be amended in accordance with the procedure set out in Schedule 1 and the use of land shall thereafter be undertaken in accordance with the amended plan;](#)
- j. [A copy of the Farm Environment Plan amended in accordance with condition 4h shall be provided to the Waikato Regional Council within 30 working days of the date of its amendment;](#)

**3.11.5.3 Permitted Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry Scheme**

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Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2 the use of land for farming activities (excluding commercial vegetable production) where the land use is registered to a Certified Industry Scheme, and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a permitted activity subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
2. A Nitrogen Reference Point is ~~produced~~ calculated for the property or enterprise in conformance with Schedule B within the period May 2020 to 30 November 2020; and.
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The Certified Industry Scheme meets the ~~criteria-standards~~ set out in Schedule 2 and has been approved by the Chief Executive Officer of Waikato Regional Council; and
5. A Farm Environment Plan which has been prepared in accordance with Schedule 1 and has been approved by a Certified Farm Environment Planner, is provided to the Waikato Regional Council ~~as follows~~:
  - ~~a. By 1 July 2021, for properties or enterprises within Priority 1 sub-catchments listed in Table 3.11-2 and properties or enterprises within a Nitrogen Reference Point greater than the 75<sup>th</sup> percentile nitrogen leaching value;~~
  - ~~b. By 1 July 2023 for properties or enterprises within Priority 2 sub-catchments listed in Table 3.11-2;~~
  - ~~c. By 1 July 2026 for properties or enterprises within Priority 3 sub-catchments listed in Table 3.11-2; and~~
6. Where the property or farm enterprise has a Nitrogen Reference Point below the 50<sup>th</sup> percentile nitrogen leaching value, either:
  - a. The three-year rolling average for the property or enterprise does not exceed the Nitrogen Reference Point from the date on which the Nitrogen Reference Point is provided to the Waikato Regional Council; or
  - b. The property or enterprise has an annual Nitrogen Risk Scorecard Assessment Grade the same as the Nitrogen Risk Scorecard Reference Grade as assessed in accordance with Schedule BA; and
  - c. The information required to undertake the Nitrogen Risk Scorecard Assessment as set out in Schedule BA shall be provided to the Waikato Regional Council by 1 July each year in the template prescribed in Schedule BA e; or
7. Where the property or farm enterprise has a Nitrogen Reference Point above the 50<sup>th</sup> percentile nitrogen leaching value but below the 75<sup>th</sup> percentile nitrogen leaching value, the three-year rolling average does not exceed the Nitrogen Reference Point from the date on which the Nitrogen Reference Point is provided to the Waikato Regional Council; or
8. Where the property or farm enterprise has a Nitrogen Reference Point above the 75<sup>th</sup> percentile nitrogen leaching value, the Farm Environment Plan for the

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property or enterprise will set out actions, timeframes and other measures to ensure that diffuse discharge of nitrogen is progressively reduced so that it does not exceed that 75<sup>th</sup> percentile nitrogen leaching value by 2026.

Conditions 6, 7 and 8 to be retained as notified (but renumbered as appropriate).