IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions on Proposed Plan Change 1 (and Variation 1) to the Waikato Regional Plan

TOPIC 3

BY FEDERATED FARMERS OF NEW ZEALAND INC, FEDERATED FARMERS OF NEW ZEALAND (WAIKATO REGION) 1999 INCORPORATED, FEDERATED FARMERS OF NEW ZEALAND – ROTORUA TAUPO PROVINCE INCORPORATED, FEDERATED FARMERS OF NEW ZEALAND (AUCKLAND PROVINCE) INCORPORATED

("FEDERATED FARMERS")

Submitter with ID: 74191

To WAIKATO REGIONAL COUNCIL

("WRC")

STATEMENT OF PRIMARY EVIDENCE OF GRANT ROBERT ECCLES FOR FEDERATED FARMERS ON HEARING TOPIC 3

5 July 2019



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1. EXECUTIVE SUMMARY

- 1.1 I set out below a summary of my evidence for Hearing Topic 3.
- 1.2 Farm Environment Plans ("FEPs") are the most important PC1 measure to make tangible progress toward improving the quality of the water in the Waikato and Waipa River Catchments. This is because FEPs are the vehicle within which tailored actions can be formulated to manage contaminant discharges that pragmatically reflect the circumstances of each farm and farmer, and address the particular water quality issues.
- 1.3 Given the dynamic nature of farming activities and the outcomes sought, it is impossible to craft a FEP framework that completely eliminates subjective elements and the need for some exercise of judgement by those in a preparation/certification role.
- 1.4 I largely support the Schedule 1 amendments put forward in the s42A report for Block3, however I suggest some additional amendments to Schedule 1 including the inclusion of a dispute resolution procedure.
- 1.5 I support the retention of the CIS provisions and the permitted activity status for farmers that are a member of a CIS provided that they have a FEP. I continue to hold that view because I think that a Good Farming Practices ("GFP") based FEP system with audit and grading can still be successfully implemented with a CIS based permitted activity rule. As a result I have (with assistance from FFNZ policy staff and advisors) prepared an additional Schedule 1A for FEPs as a permitted activity, in the event that the Hearing Panel decides that Schedule 1 is not appropriate for that activity status.

2. INTRODUCTION

- 2.1 My full name is Grant Robert Eccles. I am a principal planner for Tonkin and Taylor based in Hamilton.
- 2.2 My qualifications and experience as a planning expert is set out in my statement of evidence for Hearing Topic 1 dated 15 February 2019.
- 2.3 I confirm that I have read the Environment Court's Code of Conduct for Expert Witnesses as set out in the Environment Court's Practice Note 2014, and I agree to comply with it. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on the evidence of another

person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Scope of evidence

- 2.4 This planning evidence relates to Hearing Topic 3 (Part C7 to C9). In particular, the following matters:
 - a. Farm Environment Plan Content
 - b. Activity Status for Farm Environment Plans
 - c. Schedule 1 Content
 - d. Matters of Control
 - e. FEP related Policy
 - f. Subdivision
 - g. Policies 7 and 17
 - h. Definition of dairy cattle
 - i. FEP policy

3. FARM ENVIRONMENT PLANS

- 3.1 In my view the most important result of the PC1 process in order to make tangible progress toward improving the quality of the water in the Waikato and Waipa River Catchment in the next 10 years will be the introduction of the requirement for FEPs for around 5,000 farms. This is because FEPs are the vehicle within which tailored actions can be formulated to manage contaminant discharges that pragmatically reflect the circumstances of each farm and farmer and address the particular water quality issues.
- 3.2 I am aware of the Hearing Panel's concerns around the risk of inappropriate delegation of discretionary judgement to CFEPs in the preparation of FEPs. In my view, given the dynamic nature of farming activity and the outcomes sought it is impossible to craft a FEP framework that completely eliminates subjective elements and the need for some exercise of judgement by those in a preparation/certification role. The FEP approach promoted may therefore not fit perfectly within an ideal "black and white" planning world, but in my opinion the suitability of the approach to produce real gains for water quality far outweigh any perceived downsides.

- 3.3 I base my view on the evidence of the significant improvement through FEPs. This includes the improvement that has been achieved through the voluntary adoption of FEPs (such as the Dairy NZ Sustainable Milk Plan project)¹ and Dr Doole's modelling that the policy mix will significantly over deliver on the 10 year targets (with the lowest median improvement being 31% and the modelling relying on implementation of between 25% and 100% of FEP actions).²
- 3.4 On the basis of the above I largely support the Schedule 1 amendments put forward in the s42A report for Block 3. I have worked with FFNZ policy staff and Mr Millner to make additional amendments to Schedule 1. These amendments are included in the track changes version of Schedule 1 attached as **Annexure GE1** to this evidence and are summarised as follows:

(i) Purpose of a Farm Environment Plan

- 3.5 The overall purpose of a FEP is to manage the discharge of the four contaminants from farming activities using GFP. In my view, it is important that this purpose is clearly spelled out in Schedule 1 to provide overarching guidance for CFEPs in preparing FEPs. I also consider it important that clarity is provided for the context of this assessment through a framework that establishes the key parameters.
- 3.6 Mr Millner explains in his evidence how having a framework for the assessment will help the CFEP to identify, tailor, prioritise and determine the timing of appropriate actions to achieve GFP.³ Dr le Miere explains in his evidence why Federated Farmers considers that a framework is needed to evaluate and assess the "myriad of potential actions or mitigations" that might exist for addressing a particular risk.⁴ He explains why actions need to be tailored to the particular issue in the subcatchment and why it is appropriate to consider what is reasonably practicable (by reference to the issues raised by the Hill Country Farmers' Group about fencing).
- 3.7 Dr McLay's evidence on behalf of the implementation team at Waikato Regional Council was that one of their work streams was farm plan and sub-catchment planning. He explained in his written evidence how they were developing a FEP template and investigating and identifying the circumstances where sub-catchment

² Doole et al report dated 6 June 2016

¹ At paragraph 61 of his Block 3 evidence, Dr le Miere refers to the Sustainable Milk Plan project delivering 5% and 12% reductions in N and P respectively, after implementation of 70% FEP actions (each FEP having an average of 9.2 actions).

https://www.waikatoregion.govt.nz/assets/WRC/Services/publications/technical-reports/HRWOtrs/TR201859.pdf

³ Mr Millner's Block 3 evidence, paras 3.15 to 3.19.

⁴ Dr le Miere's Block 3 evidence, para 77.

plans would support PC1.⁵ In response to questions from Dr Ryder about what this work involved, Dr McLay explained that WRC are creating profiles that will assist farmers to understand what they need to address in their FEPs. He explained that they are developing profiles for all sub-catchments to assist those who want to get "ahead of the game" and prepare FEPs now.

- 3.8 During the Block 2 hearings there have been many presentations from farmers and farmer groups about the costs of various mitigations (particularly stock exclusion). There has been evidence that management changes may be more appropriate than investment in infrastructure.⁶ There has been evidence about the cost and practicality of fencing steep land.⁷ A key theme of the evidence is that there is a need to consider tailored actions, in the context of the catchments and water quality issues and in the context of what is reasonable and practical on a particular farm.
- 3.9 There has also been evidence from farmers concerned about the lack of certainty as to what is expected of them and whether (and how) cost and practicality, as well as water quality issues, will be taken into account.⁸ Having a framework would provide greater certainty for farmers e.g. the Catchment Profiles would provide clarity about what is in and what is out (in terms of issues for the sub-catchment).
- 3.10 I consider that all of the evidence supports the framework I have proposed in Part B of the track changes to Schedule 1. That requires consideration of the nature, timing and priority of actions in the context of:
 - a. Sub-catchment characteristics (including the Catchment Profiles that in my view should be one of the Methods and which I explain in more detail in the Methods section of my evidence below).
 - b. Proportionality both in terms of the scale and significance of the discharge and the industry sector's contribution to the water quality issues (this would be informed contained in the Catchment Profile).
 - c. Resources reasonably available to the farm enterprise.

⁵ Dr McLay's Block 2 evidence para 10.

 ⁶ Such as presentations by Lochiel Farms that around \$1m was spent on infrastructure over a 10 year period but the mitigation with the most environmental gain is management changes.
 ⁷ Such as presentations by the Hill Country Farmers about the cost of fencing and the practicality issues.

⁸ For example, there have been emails attached to evidence presented by the Hill Country Farmers Group where the farmers have sought clarification from Council's implementation team about whether water quality or the cost of fencing will be taken into account when considering mitigations: <u>https://www.waikatoregion.govt.nz/assets/Day-30-item-10-HCFG-attachment-1.pdf</u> and <u>https://www.waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/HR/1-v31.pdf</u>

- 3.11 Should WRC exercise control over the content of FEPs, my view is that the purpose section will also be important to guide Council officers in their assessment. In the absence of a purpose and framework, I am concerned that there is very open ended discretion as to the nature, timing and priority of actions and this will create uncertainty for farmers and make PC1 more difficult for Council to administer.
- 3.12 Based on the evidence from Council as submitter to date, Council has informally identified this issue itself and is proposing to address it through catchment profiles (in a way very similar to what is proposed in my track changes). I consider it important to formally (and consistently) provide for this in Schedule 1 as opposed to relying on Council to address this outside the plan change.

(ii) Part C

3.13 I have made some minor but, in my view, important amendments to paragraphs 2 and 3 of Part C. Paragraph 2 is amended to identify that it is Schedule C waterbodies that are relevant to the mapping assessment (if there are actions required to non-Schedule C waterbodies those will be identified through the assessment in sub-paragraph g). A new paragraph 3 is proposed to provide for an overall risk assessment on the basis of Mr Millner's opinion that such an action is an important part of a farm planning assessment (and to avoid solely focusing on parts of the farm system without considering the whole).

(iii) Objectives

- 3.14 The s42A report proposes to adopt objectives for each management area and then group the relevant GFP principles under each objective. From a planning perspective, I do not consider the objectives necessary for a document as specific as a FEP (as they largely duplicate or say the same thing as the principles but in a slightly different way) and they could potentially cause uncertainty and ambiguity.
- 3.15 In my view, the objectives ought to be deleted so that the GFP principles are simply grouped under each management area (as is the approach in the GFP Action Plan).
- 3.16 In the event that the Hearing Panel sees merit in the objectives and prefers them to remain, I consider that amendments to them are required (as explained below) and for that reason I have retained them in a modified form in Schedule 1 (and Schedule 1A).

(iv) Replace "minimise" with "manage and/or reduce"

3.17 The theme of the Objectives set out in Schedule 1 in the 42a report is to "minimise" the loss of contaminants. Minimise is defined in the Oxford English Dictionary as:

Minimise: to minimise is to reduce (something, especially something undesirable) to the smallest amount or degree.

- 3.18 In my view, "minimise" has a clear connotation of reduction and I set out my views in my Block 1 evidence about why an approach of "reducing everything, everywhere" is not appropriate. In addition, a requirement to minimise introduces uncertainty about what level of contaminant loss is to be produced.
- 3.19 As set out in more detail in the evidence of Mr Millner, the use of the words "manage and/or reduce" provides better clarity that the required assessment is against GFP and where this is already met (or even exceeded) then discharges are managed and where it is not met, there are to be managed reductions to achieve GFP. Dr le Miere also explains in his evidence why this is consistent with the intention of the governance group in developing the GFP action plan.
- 3.20 I also consider that this is more consistent with the intended use of GFP and the definition proposed in the s42A report. I consider that further amendment is required to the recommended change set out on page 51 of the s42A report (with my changes shown in *italics* below):

Good Management <u>Farming</u> Practice/s: For the purposes of Chapter 3.11, means industry agreed and approved practices and actions undertaken on a property or enterprise that <u>manage</u>, reduce <u>er and/or</u> minimise the risk of contaminants entering a water body.

(v) GFP Principles

- 3.21 I have proposed changes to the wording of some of the GFP principles. The reasons for this are explained in the evidence of Mr Millner and Dr le Miere. The changes are summarised as follows:
 - a. The word "minimise" has been replaced with the words "manage and/or reduce" for the reasons explained above.
 - b. Some of the changes are to reflect the wording adopted in the GFP Action Plan, which more clearly focus on resource use efficiency (e.g. "agrinomically

appropriate" in Principle 3) or on the aspect of the farm that is being managed (e.g. "transport" in Principle 10).

- c. Some of the changes are to reflect the obligations in PC1, e.g. the 75th percentile in Principle 9 is to be achieved "by 1 July 2026." I am concerned that unless these words are included an implication is that a farm would likely be assessed as a D grade because it is not meeting the 75th percentile before that date (whereas the plan provides for a reasonable transition to that level).
- d. Some changes are to provide for tailoring of stock exclusion and setback standards in Schedule C. This includes the deletion of Principle 13 (my view is that farms ought to be able to propose acceptable alternative solutions to Schedule C as part of a FEP and an application for a controlled activity consent). Another change is the use of the word "practicable" in Principle 12 (to recognise that it is technically "possible" to stock exclude but there is a need to provide for the assessment contemplated by the framework I propose in Part B, particularly for farms like those presented by the Hill Country Group).

(vi) FEP review requirements (Part D) and FEP changes (Part E)

- 3.22 I have not proposed any changes to the FEP review or change requirements (other than to change the rules referred to in paragraph 1, in the event that the Hearing Panel decides to adopt an alternative Schedule for FEPs prepared as a permitted activity under the CIS) or FEP changes.
- 3.23 I consider that these two sections are a pragmatic and appropriate response to monitoring, reviewing or changing FEPs (particularly in light of the volume of FEPs that will need to be prepared, the dynamic nature of farming as an activity that needs to respond to changing circumstances, and the fact that PC1 is introducing regulation to well developed existing activity). This is explained in more detail in Mr Millner's evidence and has been demonstrated by many of the farmers who have presented to the Hearing Panel.

(vii) Dispute Resolution Procedure (Part F)

3.24 The s42A authors do not see the need for a disputes procedure to be written into the plan as has been proposed in the FFNZ submission, instead preferring the provisions of sections 357 and 358 of the RMA as an appropriate dispute resolution mechanism. However, in my view the nature of the dispute that could arise i.e. certification or not of a FEP, does not lend itself to the s357 process.

- 3.25 From my reading of the RMA, refusal by Council to accept or certify a FEP is not one of the "decisions" that s357 enables an objection to, thus s357 cannot be relied upon. Regardless of that, s357 requires an application to be made with associated costs and statutory timeframes which would seem to be an inefficient and expensive way for such an issue to be resolved.
- 3.26 My support for the insertion of a formal dispute resolution procedure is borne from experience in witnessing the process churn that can be quickly produced if there is reluctance/refusal by Council to certify or accept a plan and there is no clear mechanism or process to resolve the matter.
- 3.27 In this case, where there will be 1000's of FEPs submitted to WRC for certification or acceptance, the insertion of a documented dispute resolution procedure is in my view a sensible addition to the plan that will promote administrative efficiency and effectiveness.

4. FEP Activity Status

- 4.1 The FEP system set out in Mr Dragten's report is predicated on all farmers over 20ha obtaining a resource consent as a controlled activity. Coupled with the proposed audit and grading system (which I support) this consent based approach would provide WRC with the ability, through s128 review, to exert more stringent control over poor performing D grade farmers (which could lead to enforcement action).
- 4.2 However, as set out in my Block 2 evidence where I discuss the risk of regulatory failure, I support the retention of the CIS provisions and the permitted activity status for farmers that are a member of a CIS provided that they have a FEP. I continue to hold that view because I think that a GFP based FEP system with audit and grading can still be successfully implemented with a CIS based permitted activity rule.
- 4.3 In addition, I consider that the CIS regime is likely to result in additional benefits that will not be achieved through a Council consent process. These are the benefits that have been put forward by Miraka and Fonterra during the Block 2 hearings and are usefully summarised and expanded upon at paragraphs 3.60 to 3.63 of Mr Millner's evidence.
- 4.4 While I hold the view as set out above that the Schedule 1 provisions as attached to this evidence do not involve undue delegation of discretionary judgement, in the event that the Hearing Panel disagrees, I (along with Mr Millner) have assisted FFNZ to formulate an alternative Schedule 1A (attached as Annexure GE2 to this

evidence). Schedule 1A sets out the requirements for FEPs for a permitted activity, in a much more narrow and prescribed way than Schedule 1.

- 4.5 Before considering Schedule 1A I note that there are other regions that have adopted FEPs as permitted activities. This includes Southland and Canterbury Regional Plans, Tukituki Plan Change 6, and Gisborne District Plan. I have reviewed the FEP requirements in those plans and they are significantly less structured and detailed than the s42A officers' recommendations for Schedule 1. The only real difference in practice between those regions and the Waikato (in terms of farms and the expected FEP) appears to be the volume of farmers requiring FEPs, with no other region anticipating thousands of FEPs. Some of these regimes have a certification and auditing process for farm planners and others do not. Some of these regimes have similar or more directive water quality objectives, others have less.
- 4.6 In my view, the Waikato situation (when comparing it with other regions) lends itself to a permitted activity regime due to:
 - a. The volume of FEPs to be prepared (and the concerns expressed through this process as to Council's ability to process the applications if they all required consent).
 - b. The structured certification and auditing process for CFEPs.
 - c. Dr Doole's modelling showing that the FEP proposal will significantly overshoot the 10 year targets (on an assumption that not all of the actions in a FEP are implemented).
 - d. The structure and detail proposed in Schedule 1 (particularly when compared with the brevity and discretion in FEP schedules in other regions).
 - e. The additional benefits associated with the CIS (as explained above).

Schedule 1A

- 4.7 Schedule 1A sets out the suggested content of a "tick box" FEP and (if the Hearing Panel decides it appropriate) could apply wherever a farming activity over 20ha in area is permitted (i.e. either as part of a CIS or by way of another permitted activity rule such as rule 3.11.5.2).
- 4.8 Schedule 1A follows largely the same format as Schedule 1 (i.e. it has the same parts and structure) but the main difference is that actions and practices are identified for each GFP principle, with the assessment being "yes," "no" or "N/A" but

provision still provided for more detailed actions to be inserted and the documents, plans or other evidence required to demonstrate compliance clearly specified.

- 4.9 I consider that Part B (purpose of FEP) is still a relevant and important framework against which to assess actions/practices because there will still be situations where there is more than one action or where priority of actions need to be assessed. Mr Millner's opinion is that an overall risk assessment is still a valuable exercise so paragraph 3 of Part C is retained.
- 4.10 I have amended paragraph 4 of Part C to include the practices that are now listed in Schedule 1A. I have amended paragraph 4(b) to refer to the timeframes in Policy 5 (prioritisation of sub-catchments). The intention is to ensure that the actions/practices in the FEP occur by the deadlines set in PC1 e.g. stock exclusion in Priority 1 sub-catchments by 2023 (based on the recommendations in the Block 2 s42A report). My opinion was that it was clearer to refer to the policy setting the relevant timeframes but there may be a more appropriate way of achieving the same outcome. The intention is that Schedule C, for example, does not need to be complied with at the date the FEP is certified, but stock do need to be excluded in accordance with Schedule C by 2023 in Priority 1 catchments (if that is the date that the Hearing Panel adopts and noting my Block 2 evidence is that a time period from the date PC1 is operative ought to be adopted as opposed to specific points in time).
- 4.11 Paragraph 5 of Part C has simply been moved up as I thought it read better if it was before the list of management areas, principles and practices.
- 4.12 Part C then lists the actions/practices for each GFP principle. The content of the actions/practices are straightforward matters that largely (although not totally) eliminate discretionary judgement. The source of the matters included come from a range of farm menu and FEP guidance documents prepared by a variety of rural sector agencies and organisations (as more fully explained in the evidence of Dr Le Miere and Mr Millner).
- 4.13 I have retained parts D, E and F as proposed in my amendments for Schedule 1. As discussed below, I consider that the review and grading system can still operate effectively under a permitted activity. I also consider that the flexibility to change the FEP ought to be retained and, for the reasons explained above, the dispute resolution is still relevant.
- 4.14 While in my view the Schedule 1A "tick box FEP" goes a fair way toward addressing the Hearing Panel's concerns I do not regard it as the finished product it is what

FFNZ policy staff, Mr Millner and myself could produce in the time we had available prior to the evidence in chief deadline for Hearing Block 3. In my view the Schedule 1A provisions would usefully benefit from specific and directed conferencing by experts with experience in the FEP area.

Review and grading system

- 4.15 Regardless of the above, a key issue that I have identified to the success of a permitted activity FEP provision is how a farmer, who holds a FEP as a permitted activity through a CIS, would be appropriately regulated by WRC if their performance was assessed as a D grade by a CFEP.⁹ This is because there would be no resource consent to review the conditions of under s128 of the RMA.
- 4.16 I consider that this issue can be addressed by careful drafting and do not consider it a flaw to the "permitted with FEP if part a CIS" approach.
- 4.17 This would involve amending CIS rule 3.11.5.3 to include a clause to the effect that a farmer operating with a FEP as a Permitted Activity under a CIS will lose that status if their performance was assessed as a D grade (i.e. not A, B or C). In that event the farmer would need to apply for a controlled activity consent within six months. As part of the assessment of that application, Council could set a timeframe and consent conditions for achieving compliance with the action(s) that resulted in the D grade.
- 4.18 To reflect this, I have proposed amendments to paragraph 6 of the CIS rule 3.11.5.3 (which I propose is changed to a permitted activity rule) and the opening paragraph of rule 3.11.5.4 (which I propose is changed to a controlled activity rule) attached to my evidence as **Annexure GE3.** My changes are to the s42A recommended rules and my changes are shown as green track changes.
- 4.19 In like manner to that proposed under a fully consent based system, a farmer that had been assessed as D grade and subject to more prescriptive conditions could apply to have those conditions cancelled if their performance was assessed as better than D grade in the future. The status of the farm activity would not however revert to Permitted – once the Controlled Activity consent is in place it will continue to apply

⁹ This would be on top of whatever censure might eventuate from the CIS itself, which would likely include expulsion of that farmer from the scheme. It could be argued that in itself may be enough to trigger the loss of permitted activity status and the need for a controlled activity consent, however in my view it is more efficient and effective to include an explicit rule based provision to address the situation.

on an enduring basis, albeit the conditions may vary depending on environmental performance.

- 4.20 Inherent in this system is that a Controlled Activity rule/status is required.¹⁰ Thus far in the PC1 process a number of versions of a controlled activity rule have been produced for consideration by the Hearing Panel, including in the FFNZ submission.
- 4.21 Given the evolving details of the GFP based FEP provisions now being available through the Block 3 42A report, the proposed Controlled Activity Rule contained in Annexure GE3 reflects my analysis of what a Controlled Activity rule should contain. I note that this version supersedes the Controlled Activity rule version attached to my Block 2 evidence.

5. Matters of Control

- 6.1 In both my Block 1 and Block 2 evidence, I have set out concerns with regards to whether WRC needed to reserve control over the contents of FEPs for those farms not part of a CIS (i.e. for which controlled activity consent was required) given that they would have been either prepared by or certified by a CFEP. I note Mr Millner's opinions in his Block 3 hearing evidence, that any control over the content of FEPs ought to be limited to a "technical audit" and that councils are not well equipped to make the FEP evaluative assessment. This is similar to my views about the capacity and capability of Council staff and I can see Mr Millner's point that there may be technical areas of Council expertise, able to be exercised "from a desktop," that could benefit the assessment.
- 6.2 The details of the GFP based FEP provisions have also been evolving and since preparing my Block 1 and Block 2 evidence, I now have the benefit of understanding the officers' recommended framework and process. I now support WRC reserving control in part over the contents of a FEP where a FEP is required through the Controlled Activity rule.
- 6.3 My support is qualified because in the event that the Hearing Panel elects to retain the "permitted FEP if part of a CIS" approach , one of the reasons that a controlled activity consent would be required would be if a non-compliance with one of the "tick box" requirements was proposed for a farming activity through a FEP. For example,

¹⁰ Given the evidence already submitted to the Hearing Panel, it is clear that the option of restricted discretionary status as recommended in the Block 2 s42A report is neither advisable nor warranted on a range of grounds.

a FEP may include a departure from the Schedule C Stock Exclusion requirements. Council needs to retain the control over that specific matter, in order to impose conditions if the proposed departure was not assessed as suitable in the circumstances, but does not need to retain wholesale control over every aspect of the FEP given it has either been prepared or certified by a CFEP.

- 6.4 For that reason, I have included in the Controlled Activity rule in Annexure GE3 to this evidence a limitation on the matters to which Council may exert control, with that limit being to the subject matter of the standard infringed (see matters of control i and ii).
- 6.5 My support is also qualified on the basis that the changes to Schedule 1 proposed in my track changes are adopted. My concern is that without these amendments (such as the framework established my Part B and replacement of the word "minimise" with "manage and/or reduce") there is the potential for controls to be imposed or amendments required to FEPs to require actions that may be disproportionate to the benefits generated, for example.
- 6.6 As proposed by Mr Millner, given that a FEP is prepared by a certified and audited expert, any control ought to be limited to technical matters that are able to be assessed from a "desk top" and are within the Council officer's area of expertise.
- 6.7 This is also all subject to amendments to provide a reasonable dispute resolution provision, as explained above.

6. Deletion/Retention of Methods

- 6.1 I do not agree with the recommendation in the s42A report to delete all of the Implementation Methods in their entirety. The WRC must, as directed by s32 of the RMA, consider methods other than rules for achievement of its objectives. Some of the Implementation Methods that are recommended for deletion set out matters that are critical to the successful implementation of the Plan Change through the FEP process.
- 6.2 An example is Method 3.11.4.5 that refers to Sub-catchment Scale Planning, which in turn links to Policy 9 (Sub-catchment [including edge of field] mitigation planning, co-ordination and funding). Both the method and the Policy are important to the FEPs, because they in part reflect the work that WRC is currently carrying out on the preparation of sub-catchment profiles, which in turn will contribute to informing the contents of the FEPs.

- 6.3 FFNZ's submission seeks the adoption of a new Method 3.11.4.5A to require WRC to develop Catchment Profiles. The intention is for WRC to collate the information it already holds on each sub-catchment into one location (the online portal) and to keep the profile updated as new information becomes available. The wording FFNZ proposed in its submission is contained in **Annexure GE4**.
- 6.4 As explained above (in the context of Part B of my amendments to Schedule 1), I understand that WRC is already doing something similar to assist the preparation of FEPs. As explained above, I consider that formalising this would provide greater certainty for farmers, CFEPs and Council.
- 6.5 In my view the Methods should be retained, and in light of the GFP approach to the FEPs an additional method added¹¹ that commits Council to preparing a manual for auditing FEPs and farmer performance, as set out in Mr Dragten's report included in the 42A report. If the methods are retained, I consider that Method 3.11.4.3 ought to be amended to reflect Dr Dragten's review and grading approach to FEPs. In addition, the information and monitoring aspects of the methods ought to be improved (as proposed in FFNZ's submission) to ensure that sight is not lost over the next 10 years of the need to improve data, monitoring and our understanding of the Catchment, its issues and progress.

7. Subdivision

- 7.1 An issue that I believe is important that has largely escaped attention until now (probably because it is fraught) is that of what happens to a NRP when a property is subdivided? Take for example a farm that holds a NRP if it is subdivided into two new lots do each of the new lots retain the NRP of the parent property, or do they receive 50% of the parent property NRP, or is some apportionment exercise undertaken based on which Overseer blocks are on which property? What happens after Overseer version changes?
- 7.2 The answer may depend on the size of the new lots being created and the purpose to which they will be used. If one of the lots is 20ha or less in area then it would not be captured by the NRP requirement in PC1 in any event, thus has no need for a NRP. In that situation the balance lot (if it were over 20ha in area) could presumably retain the parent property NRP (but this may depend on the nature of the land subdivided off and its use prior to sub-division).

¹¹ Or in the alternative, additions be made to Implementation Method 3.11.4.3 Farm Environment Plans.

- 7.3 It becomes more difficult when two lots are created that are over 20ha in area and both require a NRP. There will be no 5 year rolling average data available with which to formulate an NRP. My tentative recommendation to solve this vexed issue would be for an assumed NRP to be assigned to the new lot until such time as sufficient data was available to properly formulate a NRP. The assigned NRP could be an average value or a "bottom of range" value.
- 7.4 Unfortunately, without technical assistance all I can conclude at this point is that further consideration needs to be given to the subdivision issue and it may lend itself to directed expert conferencing.

8. Nitrogen Reference Point

- 8.1 An issue that has vexed other water quality plan changes is nitrogen benchmarking, reductions and Overseer version change. My observation is that there is general consensus about the strengths and weaknesses of Overseer and an understanding that like any model it is only as good as its assumptions and inputs. In my view, Mr Dragten has come up with an innovative proposal for how nitrogen can be monitored without requiring rigid adherence to a NRP using Overseer.
- 8.2 With a focus on levels of confidence and the ability to refer to a range of ways of establishing confidence that nitrogen has not increased above a NRP, Mr Dragten's proposal avoids the need to continually update the NRP and deal with Overseer version change. In my opinion, such a system could work well in the PC1 framework where the reference point is used for exactly that purpose a reference to the modelled nitrogen discharge at a point in time. It also works well in a framework where the emphasis is on FEPs to achieve water quality outcomes as opposed to relying on maintaining a N allocation.
- 8.3 Mr Millner identifies several issues in his evidence that are in some respects related to the subdivision issues raised above and may also benefit from directed expert conferencing. I understand those issues to be:
 - a. What happens for a farm that does not have sufficient data for the reference years to calculate a NRP?
 - b. What happens for those farms for whom the reference years are not representative of their farm system?

- 8.4 Mr Millner's description of the issue and potential solutions could lend themselves to providing an exceptions clause or provision in Schedule B where these circumstances could be provided for.
- 8.5 Finally, I note that the s42A report proposes the deletion of the definition of the five year rolling average.¹² For the reasons explained in Mr Millner's evidence (particularly as it appears that Overseer may still be used as a tool for some farmers with an NRP and for those above the 75th percentile), I consider that that the definition ought to be retained.

9. Policies 7 and 17

- 9.1 The s42A report recommends the deletion of Policy 7 on the basis that, at best, it is a statement of intent and it is not appropriate to lock in now what a future approach to nutrient or contaminant allocation should consider.¹³ I agree with this. The national approach to diffuse discharges, available technology and our understanding of the issues may be very different in 10 years time. Other factors will also likely emerge that will have an influence (e.g. national response plans for carbon reductions). Should allocation be assessed as necessary in the future then it will be subject to whatever statutory plan and regulation making tests are in the place at the time.
- 9.2 The s42A report recommends minor amendments to Policy 17.¹⁴ FFNZ's submission sought the deletion of Policy 17. I agree that it ought to be deleted or, at a minimum, significantly re-drafted.
- 9.3 My difficulty with the policy is that it I struggle to see the linkage from it to the objectives of the plan change in s32 terms (i.e. efficient and effective means of achieving the 10 year targets). It is not clear what is meant by "opportunities to enhance" or what assessment would be applied by a consent officer in deciding whether or not the policy would apply in any given circumstance. Application of the policy has the potential to impose very significant obligations on applicants when applying for consents to continue existing farming activities. The costs of the obligations that could be imposed through application of this policy have not been quantified or assessed against the potential benefits. All of these matters generate my concern as to whether the policy is the most efficient and effective means to achieve the objectives of the plan.

¹² Page 49 of s42A report.

¹³ Page 107 of s42A report.

¹⁴ Page 116 of the s42A report.

10. Definition of dairy cattle

10.1 The 42A report recommends that a definition of dairy cattle be introduced to work in conjunction with paragraph 2C of Rule 3.11.5.2 and the definitions of "dairy farming" and "milking platform". From my reading, the cumulative effect of the definitions will be to capture any cows grazing on any land which I assume is not the intended consequence. I suspect the intention is to capture grazing of cows where a milking shed is present and not capture, for example, dairy support blocks or small lifestyle properties. As such, I recommend that the definition of milking platform be amended to include reference to the presence of a milking shed. Alternatively, the words "dairy cattle" could deleted from paragraph 2C so that it just refers to "no dairy farming" (the definition of "dairy farming" would still require amendment to ensure that it captures activities that involve a milking shed).

11. FEP Policy

11.1 FFNZ in its submission sought the inclusion of new policies 2A and 2B that related respectively to the preparation and change of FEPs. Given the importance of FEPs to the successful achievement of the PC1 objectives, I continue to support Policy 2A as an efficient and effective plan provision. For completeness, Policy 2A is set out in full below:

Policy 2A: Farm Environment Plans

Manage diffuse discharges of nitrogen, phosphorous, sediment and microbial pathogens from farming enterprises by requiring the preparation of Farm Environment Plans that:

a. are effective in managing diffuse discharges on farms; and

b. are practical to implement; and

c. are consistent in assessing risks from diffuse discharges in the manner set out in Schedule 1 or 1A; and

d. set out a range of prioritised, tailored and practical mitigation actions that allow each farm to have tailored actions designed to fit the specific circumstances of the farming enterprise including soil, slope, climate and resources; and

e. recognise and provide for existing programmes of actions in place to manage diffuse discharges from the farm; and

f. are proportional in the mitigation of diffuse discharges of nitrogen, phosphorous, sediment and microbial pathogens from the farming enterprise based on:

i. the risk of contaminant loss from a property taking into account the scale and significance of the risk from the discharge of each contaminant from the farming enterprise to the likely achievement of the short term targets^ in Objective 3 or the progression towards the outcomes anticipated by the Vision & Strategy referred to in Objective 1;

ii. while recognising that flexibility in the delivery and nature of the tailored actions is necessary to accommodate changes to farming systems and address environmental risks bought about by factors such as seasonal fluctuations, unforeseeable events, health and safety obligations and animal welfare requirements.

11.2 However given the shift that has occurred through the Block 2 and Block 3 42A reports to a GFP based FEP system, and the acknowledgement of the need to allow FEPs to be changed without a s127 process (which I support), I am now of the view that Policy 2B as sought by FFNZ is no longer required.

I.R. Enel

G R Eccles

ANNEXURE GE1: FFNZ PROPOSED CHANGES TO SCHEDULE 1

Schedule 1 - Requirements for Farm Environment Plans/Te Āpitihanga 1: Ngā Herenga i ngā Mahere Taiao ā-Pāmu

The Farm Environment Plan (FEP) will be prepared in accordance with Parts A, B and B C below, reviewed in accordance with Part CD, and changed in accordance with Part DE and disputes managed in accordance with Part F.

PART A – PROVISION OF FEP

An FEP must be submitted to Waikato Regional Council (the council) using either:

- A council digital FEP tool including the matters set out in Part B below to the extent relevant; OR
- 2. An industry prepared FEP that:
 - a) includes the following minimum components:
 - i. the matters set out in Parts B below to the extent relevant; and
 - ii. <u>performance measures that are capable of being reviewed as set out in</u> Part C below
 - b) <u>has been approved by the Chief Executive of Waikato Regional Council as meeting</u> <u>the criteria in (a) and capable of providing FEPs in a digital format, consistent with</u> <u>the council data exchange specifications.</u>

The Waikato Regional Council data exchange specifications will set out the standards and detail of the data exchange process to be used by external industry parties in the provision of <u>FEPs</u>.

PART B – PURPOSE OF A FARM ENVIRONMENT PLAN

The purpose of a Farm Environment Plan is to assess the farm enterprise against good farming practice for the management of diffuse discharges of nitrogen, phosphorous, sediment and microbial pathogens. Where the farm enterprise is not consistent with good farming practice, the Farm Environment Plan is to identify the actions and mitigations to manage the diffuse discharge of nitrogen, phosphorous, sediment and microbial pathogens from the farm enterprise to achieve good farming practice.

In identifying actions and mitigations, the Farm Environment Plan is to identify the nature, combination, priority and timing of actions to manage the diffuse discharge of nitrogen, phosphorous, sediment and microbial pathogens from the farm enterprise in a way that:

- 1. <u>Recognises and provides for the characteristics of the sub-catchment within which the subject farming enterprise is located as set out in the relevant Sub-catchment Management Plan and Catchment Profile produced by Waikato Regional Council; and</u>
- 2. Corresponds to the scale and significance of the risk from the discharge of each contaminant from the farm enterprise to the likely achievement of the short term targets^ in Objective 3 or the progression towards the outcomes anticipated by the Vision & Strategy and values^ referred to in Objective 1; and
- 3. <u>Takes account of the relative contribution of the industry sector within which the farm</u> <u>enterprise belongs to the likely achievement of the short term targets^ in Objective 3</u> <u>or the progression towards the outcomes anticipated by the Vision & Strategy referred</u> to in Objective 1; and

4. Takes account of the resources reasonably available to the farm enterprise

PART BC - FEP CONTENT

The FEP shall contain as a minimum:

- 1. The property or enterprise details:
 - a) <u>Full name, address and contact details (including email addresses and telephone</u> numbers) of the person responsible for the land use activities:
 - b) Legal description of the land and any relevant farm identifiers such as dairy supply number.
- 2. <u>A map(s) at a scale that clearly shows:</u>
 - a) The boundaries of the property or land areas being farmed;
 - b) The boundaries of the main land management units or land uses on the property or within the farm enterprise;
 - c) The location of any Schedule C waterbodies;
 - d) The location of riparian vegetation and fences adjacent to Schedule C water bodies;
 - e) <u>The location on any Schedule C waterbodies waterways</u> where stock have access or there are stock crossings;
 - f) The location of any critical source areas and hotspots for contaminant loss to groundwater or surface water; and
 - g) The location(s) of any required actions to support the achievement of the objectives and principles listed in section 3.
 - h) All land that may be cultivated and land to be cultivated over the next 12-month period.
- 3. <u>An overall assessment of the risks to water quality associated with the major farming activities.</u>
- 4. <u>An assessment of whether farming practices are consistent with each of the following objectives and principles; and</u>
 - a. <u>a description of those farming practices that will continue to be undertaken in a</u> <u>manner consistent with the objectives and principles;</u>
 - b. A description of those farming practices that are not consistent with the objectives or principles, and a description of the time bound actions or practices that will be adopted to ensure the objectives or principles are met.

3a - Management area: Whole farm

Objective 1

To manage farming activities according to good farming practice, and in a way that minimises manages and/or reduces the loss of contaminants from the farm.

Principles

- 1. Identify the characteristics of the farm system, the risks that the farm system poses to water quality, and the good farming practices that minimise manage and/or reduce the losses of sediment, microbial pathogens, phosphorus and nitrogen.
- 2. <u>Maintain accurate and auditable records of annual farm inputs, outputs and management practices.</u>
- 3. <u>Manage farming operations to minimise manage and/or reduce losses of sediment,</u> microbial pathogens, phosphorus and nitrogen to water, and maintain or enhance soil <u>structure where agronomically appropriate.</u>

3b - Management Area: Nutrient management

Objective 2

To minimise nutrient losses to water while maximising nutrient use efficiency.

Principles

- 4. <u>Monitor soil phosphorus levels and maintain them at or below the agronomic optimum</u> for the farm system.
- 5. <u>Manage the amount and timing of fertiliser inputs, taking account of all sources of nitrogen and phosphorus, to match plant requirements and minimise manage and/or reduce risk of losses.</u>
- 6. <u>Store and load fertiliser to minimise manage and/or reduce risk of spillage, leaching and loss into waterbodies.</u>
- 7. Ensure equipment for spreading fertilisers is well maintained and calibrated.
- 8. <u>Store, transport and distribute feed to minimise manage and/or reduce wastage, leachate and soil damage.</u>

Objective 3

To farm in accordance with the nitrogen management requirements of PC1

Principle

9a. Either, where the property's NRP is ≤75th percentile:

9. <u>Farm in a manner that does not result in farm nitrogen losses exceeding the farm's</u> <u>NRP;</u>

<u>9b. Or, where the property's NRP is > than the 75th percentile</u>

9. Farm in a manner that does not result in farm nitrogen losses exceeding the 75th%ile for the FMU from 1 July 2026; or

3c - Management Area: Waterways

Objective 4

To minimise manage and/or reduce losses of sediment, microbial pathogens, phosphorus and nitrogen to waterways.

Principles

- 10. <u>Identify risk of overland flow of phosphorus, sediment and microbial pathogens on the property and implement measures to minimise manage and/or reduce losses transport of these to waterbodies.</u>
- 11. Locate and manage farm tracks, gateways, water troughs, self-feeding areas, stock camps, wallows and other sources of run-off to minimise manage and/or reduce risks to water quality.

Objective 5

To exclude stock from waterbodies and minimise manage and/or reduce stock damage to the beds and margins of wetlands and riparian areas.

Principle

12. Exclude stock from waterbodies to the extent that it is compatible with land form, stock class and stock intensity. Where exclusion is not possible practicable, mitigate impacts on waterways.

13. Exclude stock in a manner consistent with the requirements of schedule C.

3d - Management Area: Land and soil

Objective 6

To minimise manage and/or reduce contaminant losses to waterways from soil disturbance and erosion.

Principles

- 14. <u>Manage periods of exposed soil between crops/pasture to reduce risk of erosion,</u> overland flow and leaching.
- 15. <u>Manage or retire erosion-prone land to minimise manage and/or reduce soil losses</u> through appropriate measures and practices.
- 16. <u>Select appropriate paddocks for growing crops and intensive grazing, recognising and mitigating possible nitrogen and phosphorus, faecal, and sediment loss from critical source areas.</u>
- 17. <u>Manage grazing and crops to minimise manage and/or reduce losses from critical source areas.</u>

3e - Management Area: Effluent

Objective 7

To minimise manage and/or reduce contaminant losses to waterways from farm animal effluent.

Principles

- 18. Ensure the effluent system meets industry-specific Code of Practice or equivalent standard.
- 19. <u>Have sufficient storage available for farm effluent and wastewater and actively manage effluent storage levels.</u>
- 20. Ensure equipment for spreading effluent and other organic manures is well maintained and calibrated.
- 21. Apply effluent to pasture and crops at depths, rates and times to match plant requirements and soil water holding capacity.

3f - Management Area: Water and irrigation

Objective 8

To operate irrigation systems efficiently and ensuring that the actual use of water is monitored and is efficient.

Principles

- 22. <u>Manage the amount and timing of irrigation inputs to meet plant demands and minimise</u> <u>manage and/or reduce risk of leaching and run off.</u>
- 23. Design, check and operate irrigation systems to minimise the amount of water needed to meet production objectives.
- 5. <u>The FEP shall include for each objective and principle in section 3 above:</u>
 - a) Detail and content that reflects the scale of environmental risk posed by the activity;
 - b) <u>A defined and auditable description of the actions and practices to be undertaken to</u> farm in accordance with the objectives and principles in Part BC;
 - c) <u>The records and evidence that must be kept that demonstrate performance and the achievement of an objective or principle listed in Part BC.</u>

PART CD - FEP REVIEW REQUIREMENTS

The FEP shall be reviewed by a Certified Farm Environment Planner for consistency with this schedule:

- 1. Prior to lodging a landuse consent application with the Council under rule 3.11.5.34 3.11.5.5 of PC1; and
- 2. Within 12 months of the granting of that consent application; and
- 3. <u>In accordance with the review intervals set out in the conditions of that resource consent.</u>

The purpose of the review is to provide an expert opinion whether the farming activities on the property are being undertaken in a manner consistent with the objectives and principles set out in Part B of this schedule.

The review shall be undertaken by a Certified Farm Environment Planner who holds a reviewing endorsement (issued by WRC), and must be undertaken in accordance with the review process set out the Waikato Regional Councils FEP Independent Review manual.

The review shall be undertaken by re-assessing the FEP in accordance with the requirements set out in this schedule.

The results of the review shall be provided to the Waikato Regional Council, within 20 working days of the review due date.

PART DE - FEP CHANGES

Unless otherwise required by the Waikato Regional Council in accordance with any conditions of the resource consent, changes can be made to the FEP without triggering the need for review by a CFEP, provided:

- 1. The farming activity remains consistent with Part B C of this schedule
- 2. <u>The change to the FEP does not contravene any mandatory requirement of the resource consent, or any requirement of the Regional Plan that is not already authorised.</u>
- 3. <u>The nature of the change is documented in writing and made available to any CFEP</u> <u>undertaking a review, or to the Waikato Regional Council, on request.</u>

PART F – DISPUTE RESOLUTION

Any dispute or difference arising out of or in relating the approval of or amendments to or auditing of a Farm Environment Plan may be referred to mediation, a non-binding dispute resolution process in which an independent mediator facilitates negotiation between the parties.

Mediation may be initiated by either party writing to the other party and identifying the dispute which is being suggested for mediation. The other party will either agree to proceed with mediation or agree to attend a preliminary meeting with the mediator to discuss whether mediation would be helpful in the circumstances.

The parties will agree on a suitable person to act as mediator or will ask the Arbitrators' and Mediators' Institute of New Zealand Inc. to appoint a mediator. The mediation will be in accordance with the Mediation Protocol of the Arbitrators' and Mediators' Institute of New Zealand Inc."

The mediation shall be terminated by -

(a) The signing of a settlement agreement by the parties; or

- (b) Notice to the parties by the mediator, after consultation with the parties, to the effect that further efforts at mediation are no longer justified; or
- (c) Notice by one or more of the parties to the mediator to the effect that further efforts at mediation are no longer justified; or
- (d) The expiry of sixty (60) working days from the mediator's appointment, unless the parties expressly consent to an extension of this period.

If no mediation is agreed to or if the mediation should be terminated as provided in (b), (c) or (d), any dispute or difference arising out of or relating to the approval of or amendments to a Farm Environment Plan, shall be referred to and finally resolved by arbitration in New Zealand in accordance with New Zealand law and the current Arbitration Protocol of the Arbitrators' and Mediators' Institute of New Zealand Inc. The arbitration shall be by one arbitrator to be agreed upon by the parties and if they should fail to agree within twenty-one (21) days, then to be appointed by the President of the Arbitrators' and Mediators' Institute of New Zealand Inc.

A Farm Environment Plan shall be prepared in accordance with the requirements of A below. The Farm Environment Plan shall be certified as meeting the requirements of A by a Certified Farm Environment Planner.

The Farm Environment Plan shall identify all sources of sediment, nitrogen, phosphorus and microbial pathogens, and identify actions, and timeframes for those actions to be completed, in order to reduce the diffuse discharges of these contaminants.

The Farm Environment Plan must clearly identify how specified minimum standards will be complied with.

The requirements set out in A apply to all Farm Environment Plans, including those prepared within a Certified Industry Scheme.

This schedule applies to all farming activities, but it is acknowledged that some provisions will not be relevant to every farming activity.

- A. Farm Environment Plans shall contain as a minimum:
- 1. The property or enterprise details:
 - (a) Full name, address and contact details (including email addresses and telephone numbers) of the person responsible for the property or enterprise.
 - (b) Trading name (if applicable, where the owner is a company or other entity).
 - (c) A list of land parcels which constitute the property or enterprise:
 - (i) the physical address and ownership of each parcel of land (if different from the person responsible for the property or enterprise) and any relevant farm identifiers such as the dairy supply number, Agribase identification number, valuation reference; and
 - (ii) The legal description of each parcel of land.

- 2. An assessment of the risk of diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens associated with the farming activities on the property, and the priority of those identified risks, having regard to sub-catchment targets in Table 3.11-1 and the priority of lakes within the sub-catchment. As a minimum, the risk assessment shall include (where relevant to the particular land use):
 - (a) A description of where and how stock shall be excluded from water bodies for stock exclusion including:
 - (i) the provision of fencing and livestock crossing structures to achieve compliance with Schedule C; and
 - (ii) for areas with a slope exceeding 250 and where stream fencing is impracticable, the provision of alternative mitigation measures.
 - (b) A description of setbacks and riparian management, including:
 - (i) The management of water body margins including how damage to the bed and margins of water bodies, and the direct input of contaminants will be avoided, and how riparian margin settling and filtering will be provided for; and
 - (ii) Where practicable the provision of minimum grazing setbacks from water bodies for stock exclusion of 1 metre for land with a slope of less than 15° and 3 metres for land with a slope between 15° and 25°; and
 - (iii) The provision of minimum cultivation setbacks of 5 metres.
 - (c) A description of the critical source areas from which sediment, nitrogen, phosphorus and microbial pathogens are lost, including:
 - (i) the identification of intermittent waterways, overland flow paths and areas prone to flooding and ponding, and an assessment of opportunities to minimise losses from these areas through appropriate stocking policy, stock exclusion and/or measures to detain floodwaters and settle out or otherwise remove sediment, nitrogen, phosphorus and microbial pathogens (e.g. detention bunds, sediment traps, natural and constructed wetlands); and
 - (ii) the identification of actively eroding areas, erosion prone areas, and areas of bare soil and appropriate measures for erosion and sediment control and re-vegetation; and
 - (iii) an assessment of the risk of diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens from tracks and races and livestock crossing structures to waterways, and the identification of appropriate measures to minimise these discharges (e.g. cut-off drains, and shaping); and
 - (iv) the identification of areas where effluent accumulates including yards, races, livestock crossing structures, underpasses, stock camps, and feed-out areas, and appropriate measures to minimise the risk of diffuse discharges of contaminants from these areas to groundwater or surface water; and
 - (v) the identification of other 'hotspots' such as fertiliser, silage, compost, or effluent storage facilities, wash-water facilities, offal or refuse disposal pits, and feeding or stock holding areas, and the appropriate measures to minimise the risk of diffuse discharges of contaminants from these areas to groundwater or surface water.
 - (d) An assessment of appropriate land use and grazing management for specific areas on the farm in order to maintain and improve the physical and biological condition of soils

and minimise the diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens to water bodies, including:

- (i) matching land use to land capability; and
- (ii) identifying areas not suitable for grazing; and
- (iii) stocking policy to maintain soil condition and pasture cover; and
- (iv) the appropriate location and management of winter forage crops; and
- (v) suitable management practices for strip grazing.
- (e) A description of nutrient management practices including a nutrient budget for the farm enterprise calculated using the model OVERSEER® in accordance with the OVERSEER® use protocols, or using any other model or method approved by the Chief Executive Officer of Waikato Regional Council.
- (f) A description of cultivation management, including:
 - (i) The identification of slopes over 15 o and how cultivation on them will be avoided; unless contaminant discharges to water bodies from that cultivation can be avoided; and
 - (ii) How the adverse effects of cultivation on slopes of less than 15° will be mitigated through appropriate erosion and sediment controls for each paddock that will be cultivated including by:
 - (a) assessing where overland flows enters and exits the paddock in rainfall events; and
 - (b) identifying appropriate measures to divert overland flows from entering the cultivated paddock; and
 - (c) identifying measures to trap sediment leaving the cultivated paddock in overland flows; and
 - (d) maintaining appropriate buffers between cultivated areas and water bodies (minimum 5m setback).
 - (e) A description of collected animal effluent management including how the risks associated with the operation of effluent systems will be managed to minimise contaminant discharges to groundwater or surface water.
 - (f) A description of freshwater irrigation management including how contaminant loss arising from the irrigation system to groundwater or surface water will be minimised.
- 3. A spatial risk map(s) at a scale that clearly shows:
 - (a) The boundaries of the property; and
 - (b) The locations of the main land uses⁴ that occur on the property; and
 - (c) The locations of existing and future mitigation actions to manage contaminant diffuse discharges; and

¹ For dairy farms this might be the OVERSEER® blocks, for drystock farms this might be Land Use Capability blocks.

- (d) Any relevant internal property boundaries that relate to risks and mitigation actions described in this plan; and
- (e) The location of continually flowing rivers, streams, and drains and permanent lakes, ponds and wetlands; and
- (f) The location of riparian vegetation and fences adjacent to water bodies; and
- (g) The location of critical source areas for contaminants, as identified in 2 (c) above.
- 4. A description of the actions that will be undertaken in response to the risks identified in the risk assessment in 2 above (having regard to their relative priority) as well as where the mandatory time-bound actions will be undertaken, and when and to what standard they will be completed.
- 5. A description of the following:
 - (a) Actions, timeframes and other measures to ensure that the diffuse discharge of nitrogen from the property or enterprise, as measured by the five-year rolling average annual nitrogen loss as determined by the use of the current version of OVERSEER®, does not increase beyond the property or enterprise's Nitrogen Reference Point, unless other suitable mitigations are specified; or
 - (b) Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026, except in the case of Rule 3.11.5.5.

Vegetable growing minimum standards

Farm environment plans required under Rule 3.11.5.5 shall, in addition to the matters set out above, ensure the following matters are addressed.

1	Nitrogen,	Annual soil testing regime, fertiliser recommendations by block and
	Phosphorus	by crop
2	Nitrogen,	Tailored fertiliser plans by block and by crop
	Phosphorus	
3	Nitrogen,	Both (1) and (2) prepared by an appropriately qualified person
	Phosphorus	
4	Nitrogen,	Annual calibration of fertiliser delivering systems through an
	Phosphorus	approved programme such as Spreadmark/Fertspread
5	Soil/Phosphorus	As a minimum by block: an approved erosion and sediment control
		plan constructed in accordance with the Erosion and Sediment
		Control Guidelines for Vegetable Production June 2014
6	Nitrogen,	Documentation available for proof of fertiliser placement according
	Phosphorus	to recommended instruction
7	Nitrogen,	Adoption and use of improved fertiliser products proved effective
	Phosphorus	and available such as formulated prills, coatings and slow release
		mechanisms
8	Nitrogen,	Evidence available to demonstrate split applications by block/crop
	Phosphorus	following expert approved practice relating to:
		 form of fertiliser applied

 placement of fertiliser

² J and A Anderson PC1-4261, Beef and Lamb PC1-11508, Federated Farmers V1PC1-766, Horticulture NZ PC1-12435, S and A Kelton PC1-7855, Maniapoto Maori Trust Board PC1-9366

ANNEXURE GE2: FFNZ PROPOSED SCHEDULE 1A

Schedule 1A - Requirements for Farm Environment Plans for permitted activity

The Farm Environment Plan (FEP) will be prepared in accordance with Parts A, B and B C below, reviewed in accordance with Part \bigcirc D, and changed in accordance with Part \bigcirc E and disputes managed in accordance with Part F.

PART A – PROVISION OF FEP

An FEP, <u>certified by a CFEP</u>, must be submitted to Waikato Regional Council (the council) using either:

- A council digital FEP tool including the matters set out in Part B-C below to the extent relevant; OR
- 2. <u>The manner specified in a Certified Industry Scheme agreement with the Waikato</u> <u>Regional Council.</u>
- 3. An industry prepared FEP that:
 - a) includes the following minimum components:
 - . the matters set out in Parts B below to the extent relevant; and
 - ii. performance measures that are capable of being reviewed as set out in Part C below
 - b) has been approved by the Chief Executive of Waikato Regional Council as meeting the criteria in (a) and capable of providing FEPs in a digital format, consistent with the council data exchange specifications.

The Waikato Regional Council data exchange specifications will set out the standards and detail of the data exchange process to be used by external industry parties in the provision of FEPs.

PART B – PURPOSE OF A FARM ENVIRONMENT PLAN

The purpose of a Farm Environment Plan is to assess the farm enterprise against good farming practice for the management of diffuse discharges of nitrogen, phosphorous, sediment and microbial pathogens. Where the farm enterprise is not consistent with good farming practice, the Farm Environment Plan is to identify the actions and mitigations to manage the diffuse discharge of nitrogen, phosphorous, sediment and microbial pathogens from the farm enterprise to achieve good farming practice.

In identifying actions and mitigations, the Farm Environment Plan is to identify the nature, combination, priority and timing of actions to manage the diffuse discharge of nitrogen, phosphorous, sediment and microbial pathogens from the farm enterprise in a way that:

- <u>Recognises and provides for the characteristics of the sub-catchment within which the</u> subject farming enterprise is located as set out in the relevant Sub-catchment <u>Management Plan and Catchment Profile produced by Waikato Regional Council; and</u>
- Corresponds to the scale and significance of the risk from the discharge of each contaminant from the farm enterprise to the likely achievement of the short term targets^ in Objective 3 or the progression towards the outcomes anticipated by the Vision & Strategy and values^ referred to in Objective 1; and
- Takes account of the relative contribution of the industry sector within which the farm enterprise belongs to the likely achievement of the short term targets[^] in Objective 3 or the progression towards the outcomes anticipated by the Vision & Strategy referred to in Objective 1; and
- 4. Takes account of the resources reasonably available to the farm enterprise

PART BC – FEP CONTENT

The FEP shall contain:

- 1. The property or enterprise details:
 - a) Full name, address and contact details (including email addresses and telephone numbers) of the person responsible for the land use activities, and if different, the farm owner(s) and manager;
 - b) Legal description of the land and any relevant farm identifiers such as dairy supply number.
- 2. A map(s) at a scale that clearly shows:
 - a) The boundaries of the property or land areas being farmed;
 - b) The boundaries of the main land management units or land uses on the property or within the farm enterprise;
 - c) The location of any Schedule C waterbodies;
 - d) The location of riparian vegetation and fences adjacent to <u>Schedule C</u> water bodies;

- e) The location on any <u>Schedule C waterbodies</u> waterways where stock have access or there are stock crossings;
- f) The location of any critical source areas and hotspots for contaminant loss to groundwater or surface water; and
- g) The location(s) of <u>described actions and practices to be undertake</u>. any required actions to support the achievement of the objectives and principles listed in section 3.
- h) All land that may be cultivated and land to be cultivated over the next 12-month period.
- 3. An overall assessment of the risks to water quality associated with the major farming <u>activities.</u>
- An assessment of whether farming practices are consistent with each of the objectives. and principles and practices; and
 - A description of those farming practices that will continue to be undertaken in a manner consistent with the objectives, and principles and practices;
 - b) A description of those farming practices that are not consistent with the objectives, and principles and practices, and a description of the time bound actions or practices that will be adopted to ensure the objectives, and principles and practices are met by the deadline for priority sub-catchments set out in policy 5.
- 5. The FEP shall include for each objective and principle practice in section 3 above below:
 - a) Detail and content that reflects the scale of environmental risk posed by the activity;
 - b) A defined and auditable description of the actions and practices to be undertaken to farm in accordance with the objectives and principles practices in Part B below;
 - c) The records and evidence that must be kept that demonstrate performance and the achievement of an <u>objective or principle practice</u> listed in <u>Part B</u> <u>below.</u>

<u> 3a – Management Area: Whole farm</u>

Objective 1

To manage farming activities according to good farming practice, and in a way that minimises manages and/or reduces the loss of contaminants from the farm.

Principles:

- Identify the characteristics of the farm system, the risks that the farm system poses to water quality, and the good farming practices that <u>minimise_manage and/or reduce</u> the losses of sediment, microbial pathogens, phosphorus and nitrogen.
- 2. Maintain accurate and auditable records of annual farm inputs, outputs and management practices.
- Manage farming operations to <u>minimise_manage and/or reduce</u> losses of sediment, microbial pathogens, phosphorus and nitrogen to water, and maintain or enhance soil structure <u>where agronomically appropriate</u>.

Principles 1 and 2: Actions / practices

1.	Prepare and maintain a map at a scale clearly shows the matters listed in paragraph 2 above.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
2.	Identify the key characteristics of the farm system, as shown on the map, and list them below:	<u>Yes</u>	<u>No</u>	<u>N/a</u>
3.	Identify the location(s) of any required actions to support the achievement of the objectives, principles and practices listed in section 3, as shown on the map, and list them below (or in the actions box at the end of the FEP).	Yes	No	<u>N/a</u>
4.	Maintain accurate and auditable records of relevant annual farm inputs [to be specified, for example bought in feed, fertiliser], outputs and management practices and have this information available to provide to council on request.	Yes	<u>No</u>	<u>N/a</u>

Principles 1 and 2: Records to be maintained

1.	Maintain accurate records of annual farm inputs, outputs and	<u>Y</u>	<u>es</u>	<u>No</u>	<u>N/a</u>
	management practices				
2.	Identify critical source areas and required actions on farm map.	Y	<u>′es</u>	<u>No</u>	<u>N/a</u>
3.	Maintain a plan that describes the annual timing of actions and	<u>Y</u>	<u>′es</u>	<u>No</u>	<u>N/a</u>
	practices to be undertaken, or the timeline by which actions will			1	
	be completed that will control the losses of sediment, microbial				
	pathogens, phosphorus and nitrogen.				
4.	Maintain records and evidence that demonstrate the actions	<u>Y</u>	<u>′es</u>	<u>No</u>	<u>N/a</u>
	and practices are being undertaken.			1	11

Principle 3: Actions / Practices

1.	Identify areas of pugging and compaction of soils and manage in accordance with the protocols prescribed below:	Yes	<u>No</u>	<u>N/a</u>
2.	If cultivating, describe choice of cultivation techniques, including low impact cultivation methods and timing and buffer strips on [<i>to be specified</i>] slopes:	Yes	No	<u>N/a</u>
3.	Where paddocks are used as supplement feed-out areas, the supplement is not placed in critical source areas o directly connected to waterways	Yes	<u>No</u>	<u>N/a</u>

Principle 3: Records to be maintained

1.	Identify areas that will be cultivated or cropped in the next 12 months on farm map.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
2.	Identify retired, riparian planted and fenced and erosion- planted areas on farm map.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
3.	Maintain records and evidence that demonstrate the actions and practices are being undertaken.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

3b – Management Area: nutrient management

Objective 2

To minimise nutrient losses to water while maximising nutrient use efficiency.

Principles

- 4. Monitor soil phosphorus levels and maintain them at or below the agronomic optimum for the farm system.
- 5. Manage the amount and timing of fertiliser inputs, taking account of all sources of nitrogen and phosphorus, to match plant requirements and minimise risk of losses.
- 6. Store and load fertiliser to minimise manage and/or reduce risk of spillage, leaching and loss into waterbodies.
- 7. Ensure equipment for spreading fertilisers is well maintained and calibrated.
- 8. Store, transport and distribute feed to minimise manage and/or reduce wastage, leachate and soil damage.

Principle 4: Actions / Practices

1.	Monitor soil P levels and maintain them at agronomic optimum	Yes	<u>No</u>	<u>N/a</u>
	as set out in the Nutrient Management Code of Practice.		1	
2.	Where soil P levels are above optimum, develop a managed	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	reduction plan to achieve compliance with the Code of Practice		1	
	and follow that plan.			
3.	Crop nutrient requirements are determined in a nutrient	Yes	<u>No</u>	<u>N/a</u>
	budget for fertiliser prepared by a suitably qualified person.		1	
4.	Nutrient requirements for the rest of the farm are determined	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	in a nutrient budget for fertiliser prepared by a suitably			
	qualified person.			

Principle 4: Records

5.	Maintain accurate and auditable records of annual soil-test results.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
6.	Maintain an accurate and auditable nutrient budget for fertiliser use decisions.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
7.	Maintain a nutrient management plan.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
8.	Maintain and record fertiliser inputs and invoices.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principles 5, 6 and 7: Practices / Actions

9.	Soil temperature, moisture levels and the weather forecast are	Yes	<u>No</u>	<u>N/a</u>
	assessed before applying fertiliser. No N fertiliser is applied			
	during [months to be specified, potentially May-June] no P			

	fertiliser is applied during [months to be specified, potentially			
	June-July]			
10.	Nitrogen fertiliser application rate is not greater than [amount	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	to be specified, potentially 50 kgN/ha] per dressing			·
11.	Storage of fertiliser is covered and in a way that ensures no	Yes	<u>No</u>	<u>N/a</u>
	leaching (i.e. covered/sealed surface) and no runoff from			1 1
	storage site (i.e. walled/bunded) to a Schedule C waterway			
	occurs.			
12.	Equipment for spreading fertiliser is calibrated and maintained	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	at least annually and a record of that calibration/maintenance			1 1
	is kept.			
13.	If contractors are used to spread fertiliser, they are	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	Spreadmark accredited		1	

Principles 5, 6 and 7: Records

14.	Maintain records of all fertiliser applications including the	Yes	<u>No</u>	<u>N/a</u>
	product, rate, date, location, calibration/maintenance and		1	1 1
	contractor or calibration/maintenance of equipment used for			
	spreading fertiliser.			
15.	Where appropriate, maintain records of pasture walk / feed	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	wedge data and link to Nitrogen Management Plan			11

Principle 8: Practices / Actions

16.	Feed storage areas are managed so that silage and other	Yes	<u>No</u>	<u>N/a</u>
	feeds are stored in a way that ensures no leaching and no			1 1
	runoff from the storage site to Schedule C waterways.			
17.	Overland flow and rainwater is diverted away from feed	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	storage area.		1	1
18.	Feedpads or other facilities that contain permanent feed-out	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	areas are sealed and effluent is collected in accordance with			-
	the relevant Waikato Regional Plan rules.			

Principle 8 Records

19.	Identify storage of feed and permanent facilities used to feed	Yes	<u>No</u>	<u>N/a</u>
	out on farm map.			

20.	If new infrastructure is built or replaced, design plans for	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	permanent feed out areas and permanent feed storage areas			
	are kept as records.			

3b – Management Area: Nutrient management

Objective 3

To farm in accordance with the nitrogen management requirements of PC1

Principle 9

<u>9a.</u> Either, where the property's NRP is \leq 75th percentile:

Farm in a manner that does not result in farm nitrogen losses exceeding the farm's NRP;

<u>9b.</u> Or, where the property's NRP is > than the 75th percentile

Farm in a manner that does not result in farm nitrogen losses exceeding the 75th%ile for the FMU from 1 July 2026

Principle 9: Actions / Practices

1.	Obtain a Nitrogen Reference Point (NRP) in conformance with	Yes	No	<u>N/a</u>
	Schedule B.	L		
2.	Either, 2a or 2b.	Yes	<u>No</u>	<u>N/a</u>
	2a. If the farm is below the 75^{th} percentile for the FMU, then			
	farm in a manner that does not result in farm nitrogen losses			
	exceeding the farm's NRP; or			
	2b. If NRP exceeds the 75^{th} percentile for the FMU, then farm			
	in a manner to reduce the NRP to below the 75 th percentile by			
	1 July 2026.			
3.	Identify any opportunities to increase nitrogen use efficiency	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	and describe actions and timeframes to achieve that.			_11

Principle 9 Records

1. Maintain records in compliance with Schedule B.		<u>Yes</u>	<u>No</u>	<u>N/a</u>	
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<u> 3c – Management Area: Waterways</u>

Objective 4

To minimise-manage and/or reduce losses of sediment, microbial pathogens, phosphorus and nitrogen to waterways.

Principles

10. Identify risk of overland flow of phosphorus, sediment and microbial pathogens on the property and implement measures to minimise manage and/or reduce losses transport of these to waterbodies.

11. Locate and manage farm tracks, gateways, water troughs, self-feeding areas, stock camps, wallows and other sources of run-off to minimise manage and/or reduce risks to water quality.

Principle 10 Actions / practices

4.	Identify risk areas where surface runoff may enter Schedule C	Yes	No	<u>N/a</u>
	waterways and mark them on the farm map.			
5.	If cultivating paddocks with slopes of less than 15 degrees	Yes	<u>No</u>	<u>N/a</u>
	leave an uncultivated buffer strip between cultivation and			
	Schedule C waterway of at least 2m.			
6.	If cultivating paddocks with slopes of more than 15 degrees	Yes	<u>No</u>	<u>N/a</u>
	leave an uncultivated buffer strip between cultivation and			
	Schedule C waterway of at least 2m and establish in-field			
	grass buffer strips of at least 2m.			
7.	Ensure bridges and culverts have raised sides or mounds to	Yes	<u>No</u>	<u>N/a</u>
	stop runoff entering waterway.			
8.	If the track is beside a waterway, slope the track in the	Yes	<u>No</u>	<u>N/a</u>
	opposite direction so that surface flow is directed toward land			
	infiltration zones			
9.	Maintain track cut outs and culverts to appropriately direct	Yes	<u>No</u>	<u>N/a</u>
	track runoff.			
10.	Describe and maps priority areas of the farm actions to reduce	Yes	<u>No</u>	<u>N/a</u>
	overland flow of phosphorus, sediment and microbial			
	pathogens to waterbodies and evidence to demonstrate the			
	measures are being undertaken.			

Principle 10: Records

Identify risk areas on farm map	Yes	<u>No</u>	<u>N/a</u>
Identify any riparian fencing, planting or buffer strips on farm map	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain culvert and bridge design plan			
Plan describing measures to control losses in accordance with	<u>Yes</u>	<u>No</u>	<u>N/a</u>
practice 10 above and associated records		•	<u>. </u>

Principle 11 Actions / practices

11.	Feed out supplements away from Schedule C waterways.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
12.	Locate water troughs away from Schedule C waterways in a	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	dry area of paddock.			11
13.	Ensure gateways are in a dry point and are wide enough for	Yes	<u>No</u>	<u>N/a</u>
	good stock flow to reduce pugging.			J
14.	If the track is beside a waterway, slope the track in the	Yes	<u>No</u>	<u>N/a</u>
	opposite direction to avoid effluent and sediment flowing into			11
	the waterway.			
15.	Maintain track cut outs to appropriately direct track runoff.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 11 Records

Identify tracks, feed areas and troughs on farm map	Π	<u>Yes</u>	<u>No</u>	<u>N/a</u>	_
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<u> 3c – Management Area: Waterways</u>

Objective 5

To exclude stock from waterbodies and minimise manage and/or reduce stock damage to the beds and margins of wetlands and riparian areas.

Principle

- 12. Exclude stock from waterbodies to the extent that it is compatible with land form, stock class and stock intensity. Where exclusion is not possible practicable, mitigate impacts on waterways.
- 13. Exclude stock in a manner consistent with the requirements of Schedule C.

Principles 12 and 13: Actions / practices

16.	Exclude stock in a manner consistent with the requirements of	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	schedule C.		1	
17.	Mark areas where stock cross Schedule C waterways on farm	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	map		1	1
18.	Where stock cross Schedule C waterways once per week or	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	less, ensure they are supervised and actively driven across		1	
	the waterway in one continuous movement.			
19.	Install bridge or culvert across regular stock crossings where	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	stock cross Schedule C waterways more than once per week.		1	
20.	Mark drains and riparian planting on farm map and develop	Yes	<u>No</u>	<u>N/a</u>
	and retain management plan for maintaining these areas.		1	1

Principles 12 and 13: Records

Identify areas of fencing and stock crossings on farm map	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain a drain and riparian management plan	<u>Yes</u>	<u>No</u>	<u>N/a</u>

3d – Management Area: Land and soil

Objective 6

To minimise manage and/or reduce contaminant losses to waterways from soil disturbance and erosion.

Principles

- 14. Manage periods of exposed soil between crops/pasture to reduce risk of erosion, overland flow and leaching.
- 15. Manage or retire erosion-prone land to <u>minimise_manage and/or reduce</u> soil losses through appropriate measures and practices.
- 16. Select appropriate paddocks for growing crops and intensive grazing, recognising and mitigating possible nitrogen and phosphorus, faecal, and sediment loss from critical source areas.
- 17. Manage grazing and crops to minimise manage and/or reduce losses from critical source areas.

Principle 14: Actions / Practices

21.	Rest and re-sow erosion damaged areas and identify them on	Yes	<u>No</u>	<u>N/a</u>
	the farm map.		•	<u> </u>
22.	Use cover crops (e.g. oats, mustard) to reduce losses and	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	increase soil organic matter.			

Principle 14: Records

Cropping /pasture renewal policies and procedures.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Sowing and grazing dates recorded in farm dairy.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 15: Actions / Practices

23.	Identify areas of active erosion risk land on the property and mark it on the farm map.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
24.	Develop a management plan to manage and/or reduce soil losses from areas of active erosion risk.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
25.	Plant areas to protect from erosion if practical and identify these areas on the farm map.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
26.	Use cover crops (e.g. oats, mustard) to reduce the amount of bare ground	<u>Yes</u>	<u>No</u>	<u>N/a</u>
27.	Manage periods of exposed soil between crops/pasture to reduce risk of erosion, overland flow and leaching.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 15 Records

Record areas of existing erosion slumps and slips, and retired,	Yes	<u>No</u>	<u>N/a</u>
fenced and planted erosion-risk areas on farm map.		•	11

Principles 16 and 17: Actions / Practices

28.	Identify paddocks for intensive grazing, identify risk areas of	Yes	2	<u>No</u>	<u>N/a</u>	
	soil loss and overland flow including critical source areas, and		I		.1	1
	document risk management actions to reduce hillslope					
	erosion. Maintain records and evidence that demonstrate the					
	measures are being undertaken.					
	5					

Principles 16 and 17: Records

Maintain grazing management records	Yes	<u>No</u>	<u>N/a</u>	
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3e - Management Area: Effluent

Objective 7

To minimise manage and/or reduce contaminant losses to waterways from farm animal effluent.

Principles

- 18. Ensure the effluent system meets industry-specific Code of Practice or equivalent standard.
- 19. Have sufficient storage available for farm effluent and wastewater and actively manage effluent storage levels.
- 20. Ensure equipment for spreading effluent and other organic manures is well maintained and calibrated.
- 21. Apply effluent to pasture and crops at depths, rates and times to match plant requirements and soil water holding capacity.

Principle 18: Actions / Practices

29.	Comply with effluent consent conditions and regional rules.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
30.	Have an effluent management plan.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
31.	Record all effluent applications.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
32.	Train staff on how to operate and maintain the effluent system.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
33.	Effluent is collected from dairy shed, yards, sealed feed pads.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
34.	For new systems: use an accredited designer.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 18: Records

Regional Council compliance records	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Effluent management plan	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Effluent application records	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Staff training records	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Operations manual	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Effluent system design plans as systems are upgraded or replaced	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 19: Actions/practices

35.	Calculate the effluent storage volume needs using the Dairy	Yes	<u>No</u>	<u>N/a</u>
	Effluent Storage Calculator			

36.	If building new storage, use an accredited effluent designer.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
37.	Ensure storage facilities are sealed	<u>Yes</u>	<u>No</u>	<u>N/a</u>
38.	Routinely remove effluent solids that accumulate	<u>Yes</u>	<u>No</u>	<u>N/a</u>
39.	Have safety barriers, equipment and signage	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 19: Records

Keep and maintain the Dairy Effluent Storage Calculator report or	Yes	<u>No</u>	<u>N/a</u>
recommendations of the storage volume from a suitability qualified			
person.			
Keep storage design plans	Yes	<u>No</u>	<u>N/a</u>
Keep pond or tank liner specifications and warrantees	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain compaction/seepage test data	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 20: Actions / Practices

40.	Calibrate effluent irrigator / spreading equipment	<u>Yes</u>	<u>No</u>	<u>N/a</u>
41.	Inspect and maintain effluent equipment regularly	<u>Yes</u>	<u>No</u>	<u>N/a</u>
42.	Service effluent pumping equipment routinely	Yes	<u>No</u>	<u>N/a</u>

Principle 20: Records

Effluent calibration results – bucket test	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Maintenance schedule/records	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Servicing invoice	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 21: Actions / Practices

43.	Adjust effluent application timing and rates based on soil	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	moisture levels			
44.	Spread nutrient load evenly across the largest area practical	<u>Yes</u>	<u>No</u>	<u>N/a</u>
45.	Test for high potassium (K) levels on effluent block to avoid	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	animal health issues		•	
46.	Adjust fertilizer application to effluent areas based on soil tests.	Yes	<u>No</u>	<u>N/a</u>
47.	Identify and record risk areas for effluent application on map	<u>Yes</u>	<u>No</u>	<u>N/a</u>
48.	Consider odour impact during application	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 21: Records

Soil Test results	<u>Yes</u>	<u>No</u>	<u>N/a</u>	
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Nutrient budget –effluent report	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Effluent application area risk map	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Rainfall/soil moisture records	<u>Yes</u>	<u>No</u>	<u>N/a</u>

3f - Management Area: Water and irrigation

Objective 8

To operate irrigation systems efficiently and ensuring that the actual use of water is monitored and is efficient.

Principles

- 22. Manage the amount and timing of irrigation inputs to meet plant demands and minimise risk of leaching and run off.
- 23. Design, check and operate irrigation systems to minimise the amount of water needed to meet production objectives.

Principle 22: Actions / Practices

49.	Irrigate at times and at a rate that do not result in ponding.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
50.	Record irrigation events – when, where, amount	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 22: Records

Soil water budgets, moisture trace or data	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Irrigation scheduling – rainfall records, soil tapes/probes/sensors	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Water efficiency calculations	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Water meter and telemetry records	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Irrigation event and location records	<u>Yes</u>	<u>No</u>	<u>N/a</u>

Principle 23: Actions / practices

51.	An accredited design and installation company ("Blue tick") is	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	used for new irrigation system or upgrades.			
52.	Evaluate irrigation system annually to check application	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	efficiency and performance (consider using a skilled professional			
	to assess)			

53.	Carry out routine bucket tests to assess performance.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
54.	Equipment for irrigation system is inspected and maintained at	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	least annually.			
55.	Train all staff using the system (consider Irrigation NZ's operator	<u>Yes</u>	<u>No</u>	<u>N/a</u>
	and manager training)			

Principle 23: Records

Retain irrigation system design plans	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain the Commissioning report on completion of installation.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain calibration result as well as performance assessment on the	<u>Yes</u>	<u>No</u>	<u>N/a</u>
bucket test			
Retain maintenance schedule/records.	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain servicing invoices	<u>Yes</u>	<u>No</u>	<u>N/a</u>
Retain training records.	<u>Yes</u>	<u>No</u>	<u>N/a</u>

PART D – FEP REVIEW REQUIREMENTS

The FEP shall be reviewed by a Certified Farm Environment Planner for consistency with this schedule:

- 1. Prior to lodging the FEP with Council pursuant to the timeframes in rules 3.11.5.2 and 3.11.5.3; and
- 2. In accordance with the review intervals set out in rules 3.11.5.2 and 3.11.5.3.

The purpose of the review is to provide an expert opinion whether the farming activities on the property are being undertaken in a manner consistent with the objectives and criteria set out in Part B of this schedule.

The review shall be undertaken by a Certified Farm Environment Planner who holds a reviewing endorsement (issued by WRC), and must be undertaken in accordance with the review process set out the Waikato Regional Councils FEP Independent Review manual.

The review shall be undertaken by re-assessing the FEP in accordance with the requirements set out in this schedule.

The results of the review shall be provided to the Waikato Regional Council, within 20 working days of the review due date.

PART E – FEP CHANGES

Changes can be made to the FEP provided:

- 1. The farming activity remains consistent with Part B of this schedule
- 2. The change to the FEP does not contravene any mandatory requirement of rules 3.11.5.2 or 3.11.5.3, or any requirement of the Regional Plan that is not already authorised.
- 3. The nature of the change is documented in writing and made available to any CFEP undertaking a review, or to the Waikato Regional Council, on request.

PART F – DISPUTE RESOLUTION

Any dispute or difference arising out of or in relating the approval of or amendments to or auditing of a Farm Environment Plan may be referred to mediation, a non-binding dispute resolution process in which an independent mediator facilitates negotiation between the parties.

Mediation may be initiated by either party writing to the other party and identifying the dispute which is being suggested for mediation. The other party will either agree to proceed with mediation or agree to attend a preliminary meeting with the mediator to discuss whether mediation would be helpful in the circumstances.

The parties will agree on a suitable person to act as mediator or will ask the Arbitrators' and Mediators' Institute of New Zealand Inc. to appoint a mediator. The mediation will be in accordance with the Mediation Protocol of the Arbitrators' and Mediators' Institute of New Zealand Inc."

The mediation shall be terminated by -

- (a) The signing of a settlement agreement by the parties; or
- (b) Notice to the parties by the mediator, after consultation with the parties, to the effect that further efforts at mediation are no longer justified; or
- (c) Notice by one or more of the parties to the mediator to the effect that further efforts at mediation are no longer justified; or
- (d) The expiry of sixty (60) working days from the mediator's appointment, unless the parties expressly consent to an extension of this period.

If no mediation is agreed to or if the mediation should be terminated as provided in (b), (c) or (d), any dispute or difference arising out of or relating to the approval of or amendments to a Farm Environment Plan, shall be referred to and finally resolved by arbitration in New Zealand in accordance with New Zealand law and the current Arbitration Protocol of the Arbitrators' and Mediators' Institute of New Zealand Inc. The arbitration shall be by one arbitrator to be agreed upon by the parties and if they should fail to agree within twenty-one (21) days, then to be appointed by the President of the Arbitrators' and Mediators' Institute of New Zealand Inc.

ANNEXURE GE3: FFNZ PROPOSED CHANGES TO PERMITTED ACTIVITY RULE 3.11.5.3 AND CONTROLLED ACTIVITY RULE 3.11.5.4

3.11.5.3 Permitted <u>Restricted Discretionary</u> Permitted Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry <u>Sector</u> Scheme/Te Ture mō ngā Mahi e Whakaaetia ana – Ngā mahi i runga pāmu kua whai Mahere Taiao ā-Pāmu i raro i te Kaupapa ā-Ahumahi kua Whai Tohu

Rule 3.11.5.3 - Permitted <u>Restricted Discretionary</u> <u>Permitted</u> Activity Rule – Farming activities with a Farm Environment Plan under a Certified <u>Industry</u> <u>Sector</u> Scheme

Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2 t<u>T</u>he use of land for farming activities (excluding commercial vegetable production) where the land use is registered to a Certified Industry Sector 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 restricted discretionary 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 for the property or enterprise in conformance with Schedule B; and
- 3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
- The Certified Industry Sector Scheme meets the criteria set out in Schedule 2 and has been approved by the Chief Executive Officer of <u>the</u> Waikato Regional Council <u>as meeting the</u> <u>standards set out in Schedule 2</u>; and
- 5. A Farm Environment Plan which has been prepared in accordance with Schedule 1<u>A</u> and has been <u>certified</u> approved by a Certified Farm Environment Planner, <u>and</u> is provided to the Waikato Regional Council <u>at the time the resource consent application is lodged; and</u> as follows: <u>as follows:</u>
 - a. <u>Two years from the date on which this plan change becomes operative for properties or</u> <u>enterprises within Priority 1 sub-catchments listed in Table 3.11-2, and properties or</u> <u>enterprises with a Nitrogen Reference Point greater than the 75th percentile nitrogen</u> <u>leaching value;</u>
 - b. <u>Three years from the date on which this plan change becomes operative for properties</u> <u>or enterprises within Priority 2 sub-catchments listed in Table 3.11-2;</u>
 - c. Four years from the date on which this plan change becomes operative for properties or enterprises within Priority 3 sub-catchments listed in Table 3.11-2; and

- a. By 1 July 2020 <u>1 March 2022</u> for properties or enterprises within Priority 1 sub-catchments listed in Table 3.11-2, and all properties or enterprises with a Nitrogen Reference Point greater than the 75th percentile nitrogen leaching value;
- b. By 1 July 2023 <u>1 March 2025</u> 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
- 5a. Full electronic access to Overseer or any other software or system that records farm data and models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council; and
- 5b. There have been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:
 - 1. Woody vegetation to farming activities; or
 - 2. Any farming activity other than dairy farming to dairy farming; or
 - 3. Any farming activity to Commercial Vegetable Production
- 6. The use of land shall be undertaken in accordance with the actions and timeframes specified in the Farm Environment Plan; and
- 7. The Farm Environment Plan provided under Condition 5 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; and
- 8. A copy of the Farm Environment Plan amended in accordance with condition (7) shall be provided to the Waikato Regional Council within 30 working days of the date of its amendment.
 - 6. The use of land shall be undertaken in accordance with the actions and timeframes specified in the Farm Environment Plan and assessed through an audit undertaken in accordance with the review process set out the Waikato Regional Council's Farm Environment Plan Independent Review Manual by a Certified Farm Environment Planner who holds a reviewing endorsement issued by WRC to be at Review Grade A, B or C; and
 - 7. The Farm Environment Plan provided under Condition 6 may be amended in accordance with the procedure set out in Schedule 1A and the use of land shall thereafter be undertaken in accordance with the amended plan; and
 - 8. <u>A copy of the Farm Environment Plan amended in accordance with condition (7) shall be</u> provided to the Waikato Regional Council within 30 working days of the date of its <u>amendment</u>

Waikato Regional Council restricts its discretion to the following matters:

- i. The content, compliance with and auditing of the Farm Environment Plan.
- ii. The actions and timeframes to achieve Good Farming Practices or better in order to reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or to land where they may enter water.
- <u>iii.</u> The effects, including cumulatively, of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens, particularly where the activity may lead to an increase in the discharge of <u>one or more contaminants.</u>
- iv. For enterprises, the procedures and limitations, including Nitrogen Reference Points, to be applied to land that enters or leaves the enterprise.
- <u>where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value,</u>
 <u>actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced</u>
 <u>so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026.</u>
- vi. The term of the resource consent.
- vii. The timeframe and circumstances under which the consent conditions may be reviewed.
- viii. Procedures for reviewing, amending and re-approving the Farm Environment Plan.

3.11.5.4 Controlled <u>Restricted Discretionary</u> <u>Controlled</u> Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme/Te Ture mō ngā Mahi ka āta Whakahaerehia – Ngā mahi i runga pāmu kua whai Mahere Taiao ā-Pāmu kāore i raro i te Kaupapa ā-Ahumahi kua Whai Tohu

Rule 3.11.5.4 – Controlled <u>Restricted Discretionary</u> <u>Controlled</u> Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme

Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2 tThe use of land for farming activities (excluding commercial vegetable production) where that land use is not 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, which is not a permitted activity under Rules 3.11.5.1A to 3.11.5.23, or six months after the date on which the applicant is formally notified by Council of the need to apply for consent under this rule as a result of non-compliance with a standard in Rule 3.11.5.3(6), is a Restricted Discretionary permitted¹-controlled activity until:

- 1. <u>1 January 2020 <u>1 September 2021</u> for properties or enterprises in Priority 1 sub-catchments listed in Table 3.11-2</u>
- 2. <u>1 January 2023 <u>1 September 2024</u> for properties or enterprises in Priority 2 sub-catchments listed in Table 3.11-2;</u>
- 3. 1 January 2026 for properties or enterprises in Priority 3 sub-catchments listed in Table 3.11-2;²

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 for the property or enterprise in conformance with Schedule B; and
- 3. No commercial vegetable production occurs; and
- <u>A Farm Environment Plan has been prepared in conformance with Schedule 1 and has been</u> approved by a Certified Farm Environment Planner, or prepared under a Certified Sector Scheme, and is provided to the Council at the time the resource consent application is lodged; and³
- 5. Cattle, horses, deer and pigs are excluded from water bodies in accordance with Schedule C; and⁴

¹ H G and S J Brooks PC1-86, Denzie, B PC1-3617

² Fonterra V1PC1-757, Waipa DC PC1-3249, Waitomo DC PC1-10312

³ Previously part of rule (condition a) with addition of Certified Sector Schemes.

⁴ Previously part of rule (condition d)

- 6. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council; and⁵
- 7. There have been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:
 - 1. Woody vegetation to farming activities; or
 - 2. Any farming activity other than dairy farming to dairy farming; or
 - 3. Any farming activity to Commerical Vegetable Production⁶

After the dates set out in 1), 2) and 3) above the use of land shall be a controlled activity (requiring resource consent), subject to the following standards and terms:

- a. A Farm Environment Plan has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner, and is provided to the Waikato Regional Council at the time the resource consent application is lodged by the dates specified in I-III below; and
- b.—The property is registered with the Waikato Regional Council in conformance with Schedule A; and
- c. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B and is provided to the Waikato Regional Council at the time the resource consent application is lodged; and
- d. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C.

Matters of Control

Waikato Regional Council restricts its discretion to reserves control over the following matters: Matters of Control

Waikato Regional Council reserves control over the following matters:

- i. The content, compliance with and auditing of the Farm Environment Plan, in accordance with Schedule 1, except for any activity requiring consent under this Rule as a result of noncompliance with a standard in Rule 3.11.5.3, in which case control shall only be reserved over the content of the Farm Environment Plan that relates to the subject matter of the standard infringed.
- ii. The actions and timeframes to achieve Good Farming Practices, in accordance with Schedule 1, or better in order to for undertaking mitigation actions that maintain or manage and/or reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or to land where they may enter water, except for any activity requiring consent under this Rule as a result of non-compliance with a standard in Rule 3.11.5.3, in which case control shall only be reserved over the actions and timeframes that relate to the subject matter of the standard infringed.

⁵ WRC V1PC1-218

⁶ Fonterra PC1-10644

- <u>iia.</u> The effects, including cumulatively, of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens, particularly where the activity may lead to an increase in the discharge of one or more contaminants.
- <u>iib.</u> For enterprises, the procedures and limitations, including Nitrogen Reference Points, to be applied to land that enters or leaves the enterprise.
- iii.— The actions, timeframes and other measures to ensure that the diffuse discharge of nitrogen from the property or enterprise, as measured by the five-year rolling average annual nitrogen loss as determined by the use of the current version of OVERSEER[®], does not increase beyond the property or enterprise's Nitrogen Reference Point, unless other suitable mitigations are specified.
- iv. Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026.
- v. The term of the resource consent.
- vi. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent to demonstrate and/or monitor <u>the use of land generally in accordance</u> compliance with the Farm Environment Plan.
- vii. The timeframe and circumstances under which the consent conditions may be reviewed or the Farm Environment Plan shall be amended.
- viii. Procedures for reviewing, amending and re-approving the Farm Environment Plan.
- ix. Information to be provided to show that the property is being managed in a way that would not cause an increase in loss of contaminants, which may include annual Overseer modelling for the property or enterprise, or information on matters such as stocking rate, fertiliser application, imported feed and cropping

Dates:

- I. For Priority 1 sub-catchments, and properties with a Nitrogen Reference Point of greater than 75th percentile nitrogen leaching value, by 1 July 2020
- II. For Priority 2 sub-catchments, by 1 July 2023
- III. For Priority 3 sub-catchments, by 1 July 2026

Notification:

Consent applications will be considered without notification, and without the need to obtain written approval of affected persons.⁷

⁷ Forest and Bird PC1-8208

ANNEXURE GE3: FFNZ PROPOSED SUB CATCHMENT PROFILE METHOD

3.11.4.5A Catchment Profiles

Waikato Regional Council will develop Catchment Profiles for the sub-catchments listed in Table 3.11-2. Each Catchment Profile shall be developed and made publicly available a minimum of two years before the Farm Environment Plans in the sub-catchment(s) to which it relates are required to be provided to the Waikato Regional Council.

<u>A Catchment Profile shall contain all of the information relevant to water quality in a sub-</u> catchment(s), including but not limited to:

a. Sub-catchment targets and the current state for each contaminant in each sub-catchment.

b. Sector and other (including pest and natural sources of contaminants) contributions toward subcatchment targets.

c. Consented discharges and takes in the sub-catchment.

d. Any operative sub-catchment management plans.

e. Information about adjoining/related catchments, relationships between sub-catchments or opportunities to coordinate with related sub-catchments.

f. Any zones that the sub-catchment is divided into to represent farming systems or land uses (including activities generating point source discharges) of a consistent type (in terms of contaminant loss).

f. Information about hot spots or critical source areas within the sub-catchment including geophysical and climate characteristics e.g. rainfall or soil type, or historical events e.g. landslips.

g. Freshwater accounting system, monitoring plan and any other information generated pursuant to Methods 3.11.4.7 or 3.11.4.10.