
In the matter of: Clauses 6 and 8 of Schedule 1 – Resource Management Act 1991 – Submissions on publicly notified plan change and variation – Proposed Plan Change 1 and Variation 1 to Waikato Regional Plan – Waikato and Waipa River Catchments

And: **Wairakei Pastoral Ltd**

Submitter

And: **Waikato Regional Council**

Local Authority

STATEMENT OF EVIDENCE OF DWAYNE CONNELL-MCKAY
Block 2 Hearing Topics

Dated: 3 May 2019

STATEMENT OF EVIDENCE OF DWAYNE CONNELL-MCKAY

SUMMARY

Key points from Block 1

- 1 Strategic policy direction:
 - 1.1 *King Salmon* applies and the NPS-FM and the Vision and Strategy (should be read together in harmony) and provide the basis for sustainable management (RMA pt 2).
 - 1.2 No question has been raised as to the consistency between the Vision and Strategy and the NPS-FM.
 - 1.3 The Waikato Regional Policy Statement and the Vision and Strategy should be interpreted holistically, not forensically (there is no relative priority between the provisions in these documents).
- 2 The PC1 Objectives should (where appropriate) provide for the “restoration or protection” of the Waikato and Waipa Rivers and their catchments and sub-catchments. “Restoration” is defined by PC1 and “restoration or protection” should be defined to include “improvement or maintenance”.
- 3 Identifying values for FMUs is part of the mechanics under the NPS-FM Policy CA2 for developing freshwater objectives, the PC1 values have served their purpose and should more appropriately be recorded in the RMA s 32 evaluation.
- 4 All four attributes or contaminants should be managed together via risk assessment as part of the Farm Environment Plan (FEP) process.
- 5 Table 3.11-1 should also provide for limits and targets for TN and TP loads.
- 6 The first 10-years are critical for the success of PC1 and the long-term 80-year strategy, and the key dates that trigger resource consents and FEPs should be brought forward.
- 7 The OVERSEER model should not be the sole Decision Support Tool that is available for use under PC1 as of right.

Key points for Block 2

- 8 The policies, methods, and rules in PC1 as notified will not achieve Objective 3 when implemented and should be amended to meet this objective by 2026 (because early action in the first 10-years are critical for the success of PC1).
- 9 The 75th percentile nitrogen leaching value should be deleted because its implementation depends on full knowledge that will not be available during the plan period.
- 10 Land vulnerability (temporal and spatial) should be the driving criteria for land use controls in PC1.
- 11 Other tools (Decision Support Tools and models) should be available for use under PC1 without CEO approval because such approval is not required in other RMA consenting contexts. Options to provide for such tools include the PCE criteria.
- 12 FEPs should be used as the primary risk assessment tool for all 4 attributes (i.e. contaminants).
- 13 Consenting at scale:
 - 13.1 Sub-catchment consents and catchment-wide global (sector schemes) consents should be provided for in the PC1 rules together with property and enterprise consents, and any legal person or entity should be able to apply for (managing) them.
 - 13.2 The ability to manage land and its contaminant losses via a sub-catchment resource consent provides the most integrated way to achieve the Vision and Strategy
- 14 Land use change constraint as notified is not efficient in RMA s 32 terms, Policy 6 and Rule 3.11.5.7 should be amended to provide for land use change except on vulnerable land.

WPL amendments to PC1 provisions

- 15 The changes sought by Wairakei Pastoral Ltd to the PC1 provisions as notified are listed in **Appendix 1** showing underlined additions and strike-through deletions to the text.
- 16 WPL seek the following changes to the provisions of PC1;
 - 16.1 Amendments to the rules and policies to provide a pathway for enterprise, Sub-catchment and sector scheme resource consents;

- 16.2 Amendments to the rules and policies to provide a pathway for land use change;
- 16.3 Amendments to the provisions of the plan to enable the achievement of Objective 3 (Table 3.11-1) by 2026;
- 16.4 Adaptive management should be included within the policies and rules so that mitigations and actions can be monitored within resource consents;
- 16.5 Clearly defined requirements to determine the suitability of any alternative Decision Support Tools should be included in Schedule B to inform land use decisions within resource consents,
- 16.6 The actions and mitigations within Farm Environment Plans should be more focused on achieving or maintaining the freshwater objectives of the sub-catchment.

BLOCK 2 HEARING TOPICS

- 1 My name is **Dwayne Connell-McKay**. I have the qualifications and experience recorded in my statement of evidence filed in relation to the Block 1 Hearing Topics.
- 2 My statement of evidence has been prepared in accordance with the Code of Conduct for Expert Witnesses set out in Section 7 of the Environment Court of New Zealand Practice Note 2014.

TOPIC C1. DIFFUSE DISCHARGE MANAGEMENT

Overview

- 3 The management of diffuse discharges within PC1 occurs through specific provisions working together to achieve key outcomes (p.128 of the s 32 Report identifies seven key policy areas and the policy packages within them).
 - 3.1 Within these provisions I consider there to be several components or tools that Plan Change 1 (**PC1**) seeks to implement to achieve the Objectives.
 - 3.2 Aside from the conditions as defined within the permitted activity rules, PC1 primarily relies on the following components to obtain the reductions necessary to achieve the Short-Term Freshwater Objectives in Table 3.11-1, and subsequently work towards achieving the 80-year Freshwater Objectives:
 - (a) Calculate a Nitrogen Reference Point (**NRP**) using OVERSEER or alternative models (as per Schedule B of PC1);
 - (b) Formulate and implement Farm Environment Plans (**FEPs**) (as per Schedule 1 of PC1);
 - (c) Determination of the 75th percentile leaching value in each FMU (as per the definition in Part C of PC1);
 - (d) For those properties etc operating above the 75th percentile, actions and mitigations are to be implemented to reduce the Nitrogen (**N**) losses to not exceed the 75th percentile; and
 - (e) A 10% reduction in N losses from land used for commercial vegetable production is to be achieved (as

per Policy 3 and Rule 5.11.5.5 of PC1). This topic is for Block 3.

- 3.3 Within my evidence, under this Diffuse Discharge Management section I seek to amend the following components based on evidence presented on behalf of WPL:
- (a) Limit the use of the a NRP as solely a method to compare the intensity of Farming activities within a consented property, enterprise, sub-catchment, or subject land area managed under a sector scheme;
 - (b) Amend Schedule B to allow for alternative Decision Support Tools (**DSTs**) in addition to OVERSEER without the need to obtain prior approval;
 - (c) Require the preparation and implementation of FEPs sooner (I will propose specific amendments to Schedule 1 regarding FEPs in Block 3);
 - (d) The introduction of Vulnerable land criteria to assist in determining risk and appropriate mitigating actions; and
 - (e) Deleting the 75th percentile as a method to improve farming practices.
- 4 The purpose of these amendments is to improve the effectiveness of the plan and its ability to be implemented.

Four contaminants – nitrogen, phosphorus, E. coli, and sediment

- 5 In order to achieve the Objectives PC1 is required to manage the four contaminants in such a manner as to achieve the Short-Term Freshwater Objectives (**FWOs**), and to make progress towards the 80-year FWOs as defined in Table 3.11-1.
- 6 In Block 1 Dr Neale recommended that Targets and Limits for Total Nitrogen and Total Phosphorus should also be included in Table 3.11-1. If accepted these amendments further elevate the importance of Table 3.11-1, and the importance of being able to achieve them via a suitable land use policy package.
- 7 As notified the provisions and schedules in PC1 will not manage the four contaminants in a manner likely to achieve the Short-Term FWOs by 2026.
- 8 As presented by Mr Williamson's Block 1 evidence, the provisions and schedules in PC1 as notified currently concentrate on the

management of N and specifically the expectation of a long-term load to come instead of quicker flow responses and short-term loads to come. The result being the policies and rules effectively create a holding pattern, with no provisions enabling Farming activities that can demonstrate their actual effects on the environment.

- 9 Dr Neale's evidence highlighted the importance of managing all four contaminants, and that algal growth within the river is more strongly controlled by Phosphorus (**P**) than N. In para 5 of his Block 2 evidence Dr Neale further states:

"I consider it appropriate that efforts to manage algal biomass in the Waikato River should focus most on managing P".

- 10 The requirements within Schedule 1 to identify risks and appropriate mitigating actions in FEPs is an appropriate method to manage P.

- 11 In addition to FEPs, Mr Conland has stated that the identification of both Vulnerable land and suitable mitigating actions, would be an effective and complementary mechanism to manage all four contaminants.

- 12 Mr Conland in paras 78 and 79 of his Block 2 evidence presents the following criteria for identifying Vulnerable land:

12.1 Erosion Prone Land (as set by WRC guidance 3) – managing clarity and phosphorus release;

12.2 Riparian margins (up to 15 metre's as an average stream set back, and 5 metres as a minimum) - managing all four Table 3.11-1 attributes;

12.3 Nitrogen Risk Areas (land with rapid groundwater travel(response) times based on proximity to a waterbody, soil and/or aquifer transmissivity) - managing the baseflow of nitrogen to the river; and

12.4 Drainage land (where shallow groundwater is directly connected to surface water through a drainage network) - managing the direct release of all four Table 3.11-1 attributes.

- 13 Mr Conland recommends these criteria should be included within Schedule 1 such that it becomes part of the risk assessment undertaken within a FEP. I will address the detail of this amendment further in my Block 3 evidence.

- 14 Mr Williamson has also supported using the Vulnerable land approach and provides evidence on its suitability as a tool to decrease contaminant losses compared to the 75th percentile approach. I discuss this further under Topic C1.4 below.
- 15 Increasing the importance of the FEP (by requiring one for all consented activities) and requiring a Vulnerable land assessment will significantly improve the management of all four contaminants. Even so there may still be challenges in achieving Objective 3 by 2026 purely due to the time required. This is discussed further in Topic C1.2 below.

OVERSEER

- 16 I generally agree with the Reporting Officer in the Section 42A Report (para 19) that:

“The general conclusion from these discussions is that Overseer can be used in regulation in a relative sense but not an absolute sense. Overseer can be used to give a good indication of whether a change in practice, on a farm, is likely to increase or decrease nitrogen leaching from that farm. It cannot be used to definitively identify how much nitrogen is actually leaching from the farm”.

and Mr Conland’s evidence in para 34;

“The limitations with OVERSEER have been clearly outlined in the recent PCE report and are covered in the EIC of Dr Cresswell and Mr Ford (and numerous other submitters)”.

- 17 I also generally agree with the 6 key recommendations from the Reporting Officer in para 21 of the Section 42A Report.
- 18 In Block 2 Wairakei Pastoral Limited (**WPL**) has provided evidence on the Ruahuwai Decision Support Tool (**RDST**).
- 19 This evidence demonstrates the ability of an alternative DST to determine the effects on sub-catchment water quality resulting from a range of Farming activities such that it could be used within PC1 to determine an NRP, and to monitor a FEP.
- 20 WPL has submitted on several provisions that currently restrict the use of any alternative DST and explicitly require the use of OVERSEER.

20.1 OVERSEER is currently referenced in;

- (a) Schedule B - NRP;

- (b) Schedule 1- Requirements for FEPs; and
- (c) Rule 3.11.5.4 (Matters of Control).

- 21 As discussed under Schedule B below, I have recommended amending each of these provisions to remove the discretion of the Chief Executive Officer (**CEO**) of the Waikato Regional Council (**WRC**) to enable the use of alternative DSTs.
- 22 In my opinion the intended use of OVERSEER as evaluated in Part E.3 of the Section 32 Report will not achieve the Objectives of PC1. As discussed previously amendments are required to the provisions of PC1 to shift the focus to managing all four contaminants in place of concentrating on N (which is what OVERSEER does).

Nitrogen Reference Point

- 23 In relation to the application of NRPs I agree with the Reporting Officer in para 21.4. of the Section 42 Report:

“Currently, an Overseer derived NRP should not be a point of compliance, but a tool to ensure farm changes described in the FEP do not result in increasing nitrogen leaching. Overseer inputs used to develop a property’s NRP could inform consent conditions, which would then be the points of compliance for the property”.

- 24 Accepting the limitations of the NRP I recommended the removal of it from rules for Permitted Activities and the deletion of the 75th percentile. I will discuss the 75th percentile further in Topic C1.4. of my evidence.

Schedule B

- 25 Schedule B sets the requirements for when an NRP must be calculated and what data is to be used.
- 26 WPL submitted on Schedule B seeking the following:
- 26.1 The ability to use additional models to determine the N losses from the referenced farming system.
- 27 Further defining the land use activities to be included within the NRP reference period. WPL submitted on the provisions of PC1 (Schedule B, and 1) to delete the requirement that any alternative model to OVERSEER to be used to determine nutrient losses (specifically N), requires the approval of the CEO of the WRC.
- 28 This absolute discretion without any qualifications or performance criteria in my opinion is not good practice and goes beyond what

discretion an authority should provide itself, and is not consistent with numerous other activities that require modelling to describe potential environmental effects as per Schedule 4 of the RMA.

- 29 Section 92(2) of the RMA provides WRC with the ability (where necessary) to verify the capability of any proposed DST and its outputs. The costs of any audit or peer review report are usually borne by the applicant for consent.
- 30 It is my opinion that PC1 needs to stipulate the performance criteria that any alternative DST needs to satisfy.
- 31 Given the subjectivity of models and range of factors determining acceptable accuracy, it is highly likely under the notified wording that no alternative model would ever be accepted.
- 32 Having read the Parliamentary Commissioner for the Environment's (PCE) recent review of "Overseer and regulatory oversight: Models, uncertainty and cleaning up our waterways" (PCE, 2018, p. 67), I note the evaluation framework that was used to evaluate OVERSEER, but which is of more universal use.
- 33 On page 67 the report noted:
- "In the absence of a New Zealand specific framework for evaluation of environmental models, this report uses the United States EPA's evaluation framework to assess Overseer."*
- 34 The evaluation framework has 12 elements grouped into 4 topics:
- 34.1 Is the model based on sound science?
- 34.2 Is the model managed to ensure quality?
- 34.3 Does the model's behaviour approximate the real system being modelled (including the tools and procedures necessary to make the judgement)?
- 34.4 Is the model appropriate to a specific regulatory application?
- 35 Given that this evaluation framework was the most appropriate that could be found by the PCE to evaluate OVERSEER, I have recommended that it be used within an amended Schedule B, titled 'Decision Support Tool Audit' for a suitably qualified person to audit any potential DST against.
- 36 I have proposed the following amendments to Schedule B:

- 36.1 Removing the requirement for CEO approval for alternative DST's;
 - 36.2 Inclusion of criteria that any alternative DST must be able to satisfy; and
 - 36.3 The requirement for an alternative DST to have been reviewed or audited by a Suitably Qualified and Experienced Person, and confirmation that the DST satisfies the evaluation framework in Schedule B and is suitable for its intended use.
- 37 I also note that the NRP reference period in PC1 (2014-2016) based on financial reporting years could have an effect on existing farming use rights under s 20A of the RMA because the financial reporting period would have expired some months before 22 October 2016 when PC1 was notified. The notification date could therefore be a more appropriate reference date. This will be discussed further in the Legal Submissions on behalf of WPL.

Summary

- 38 As discussed previously, I recommend the amendment of the following provisions of PC1 responsible for management of diffuse discharges.
- (a) Limit the use of the a NRP as solely a method to compare the intensity of Farming activities (within a FEP) within a property, enterprise or sub-catchment only;
 - (b) Amend Schedule B to allow for alternative Decision Support Tools (**DST**), in addition to OVERSEER;
 - (a) Require the formation and implementation of FEP's sooner (I will propose amendments to the content of the FEP's in Block 3); and
 - (b) The introduction of Vulnerable Land criteria to assist in determining risk and appropriate mitigating actions.
- 39 These amendments will improve the ability to implement the provisions, and assist the rules and policies to achieve table the FWO's in Table 3.11-1.
- 40 I have included in Appendix 1 to my evidence the amended provisions of PC1 as recommended by myself.

Topic C1.2 Policy 1 and the overall rule framework

- 41 I agree with the Reporting Officer at para 299 of the Section 42A Report, that the rules as notified in PC1 should be land use rules under s 9 of the RMA.
- 42 This change to the rules of PC1 as notified, results in a change of language that is to be used within the policies, rules and methods.
- 43 As s 9 land use rules, they are no longer seeking to control the discharge of contaminants directly, instead the language now concentrates on the management of land use and farming activities, for the purpose of maintaining and enhancing the quality of water in water bodies (see WRC function under s 30(1)(c)(ii) of the RMA).
- 44 The Objectives from my Block 1 evidence and as further amended during discussion with the Panel, are attached for reference in Appendix 1 of this evidence.
- 45 As per my evidence in Block I, I consider that these amended objectives give effect to the Vision and Strategy and the National Policy Statement on Freshwater Management 2017 (NPS-FM).
- 46 In the following evidence I review the policies and rules of PC1 as notified and the ability of:
- 46.1 The policies to achieve or implement the objectives (as per s67 (1)(b) RMA);
- 46.2 The rules to implement and achieve the objectives and policies of the plan (as per s67 (1)(c) and 68 (1)(b) RMA).
- 47 Quoting from the Quality Planning Website;
- “Policies are the course of action to achieve or implement the objective (i.e. the path to be followed to achieve a certain, specified, environmental outcome)”.*
- 48 The purpose of the following evidence is to review the key policy areas as arranged in the Section 32 Report and provide an analysis of the ability of the provisions to achieve or implement the Objectives of PC1.

Staging the Transition to 80-year Goal

- 49 The ‘staged approach’ as referenced in the proposed PC1 provisions relates to two distinct timeframes, the first being ten years (2026) and the second being 80 years (2096) from PC1 being notified. The first stage is reflected within Table 3.11-1 as the ‘Short

term' freshwater objectives column, the second as the '80 year' freshwater objectives column.

- 50 The short-term freshwater objectives represent 10% of the improvement required in water quality within each sub-catchment as spatially defined in Map 3.11-2 to achieve the 80-year objectives.
- 51 PC1 as notified via its policy package seeks firstly to achieve the short-term freshwater objectives, and secondly to identify further science and policy developments which will be required to achieve the desired water quality by 2096.
- 52 Relevant PC1 provisions are:
- 52.1 Policies 5 (Block 2) and 7 and 17 that will be considered in Block 3.
- 53 Relevant Objectives are 2, 3, and 4.
- 54 WPL submitted on the following provisions in relation to 'Staging the transition to the 80-year goal':
- 54.1 Objectives 2, 3 and 4:
- 54.2 Policies 5 and 7.
- 55 Through these submissions the following amendments were sought:
- 55.1 To ensure that adaptive management is provided for within the provisions of PC1, and that its ability to be utilised as a tool to manage uncertainty and change through the stages is recognised as a suitable means to implement the 'precautionary approach'.
- 55.2 That a pathway exists within the provisions of PC1 to allow for sub-catchment management resource consents.
- 55.3 That clearer directions be given within the provisions of PC1, on the engagement and process that will occur to identify reductions in diffuse discharges that may be required.
- 55.4 To provide broader consideration of the factors that influence contaminant losses when considering limits.
- 55.5 To allow flexibility when managing contaminants via adaptive management.

Objectives

- 56 Objectives 2, 3 and 4 as amended in Appendix 1 of my evidence require the following to be achieved:
- 56.1 Ensure communities benefit from the maintenance and improvement of water quality and that social, economic and cultural wellbeing are provided for;
 - 56.2 The short-term freshwater objectives by 2026 (10% of total reduction required); and
 - 56.3 Provide for adaptive management as a tool to enable communities to continue to provide for their social, economic and cultural wellbeing through all stages of the 80-year timeframe.

Policies

- 57 Policies 5, 7 and 17 of PC1:
- 57.1 Set the course of action, timeframe and requirement for future reductions via further plan changes;
 - 57.2 Set out how allocation may occur in the future; and
 - 57.3 Provide further guidance on what other matters from the Vision and Strategy should be promoted within PC1 considerations.

Policy 5

- 58 Policy 5 is responsible for ensuring Objective 2 is achieved. Given the limited scope of PC1, that is the management of farming activities to decrease the diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, the plan change is limited in how it caters for the Social/Economic/Cultural wellbeing's. It only considers the impacts on these wellbeings of water quality from the provisions seeking restoration and protection.
- 59 As notified Policy 5 lacks clear direction on how to achieve Objective 2.
- 60 Providing flexibility and options when considering land use within the PC1 provisions would be the most appropriate way for people and communities to continue to provide for their social, economic and cultural wellbeing.

- 61 Policy 5 as amended in Appendix 1 clearly articulates the Short-Term Freshwater Objectives, and provides advice around how to manage the rate of change towards the 80-year Freshwater Objectives, along with direction on how and when to consider using adaptive management when considering consent applications.

Summary Staging the Transition to 80 Year Goal

- 62 The Section 32 Report under the heading 'Relevance' (p 135) states that:

"The staged approach makes a start on reducing discharges, taking actions that contribute to the Vision and Strategy and gathering information, with the aim of preparing property level limits."

- 63 I consider that Policies 5 and 7 will require amendment to achieve and implement Objectives 2 and 4, Policy 5 as amended should articulate the first stage and provide useful guidance on how to consider timing of actions. Then it will aid in the achievement and implementation of Objective 3.

- 64 The Section 32 Report consistently refers to the 80-year goal and the necessity to develop further provisions to achieve it. Specifically, under the heading of 'Feasibility' (p 136, section 32) the report states:

"...the policies, rules and methods are reliant on the next plan change following the directions provided..."

- 65 Policies 5, 7 and 17 will need to contribute significantly to the achievement and implementation of Objective 1. Without amending Policy 7, I do not consider that there would be enough connection and direction going forward from stage 1. I will address Policy 7 in my Block 3 evidence.

Making Reductions

- 66 The topics from the s42A Report are:

- 66.1 Policy 1 and Rule Framework;
- 66.2 Policy 2 and Farm Environments Plans; and
- 66.3 Reductions.

- 67 These are all derived from the key policy area 'Making Reductions' from the Section 32 Report. I have reviewed the policy structure as per the Section 32 Report and where necessary will make comment in relation to the Section 42A Report conclusions.

- 68 Policy 1 together with Policies 2, 3, 4 and 8 are all required to achieve and implement Objectives 1 and 3.
- 69 The relevant provisions include:
- 69.1 Rules 3.11.5.1, 3.11.5.2, 3.11.5.3, 3.11.5.4, 3.11.5.5 and 3.11.5.6; and
- 69.2 Methods 3.11.4.1, 3.11.4.2, and 3.11.4.3.
- 70 WPL submitted on the following provisions in relation to 'Making Reductions':
- (a) Objectives 1 and 3;
 - (b) Policies 1, 2, 3, 4, and 8;
 - (c) Rules 3.11.5.3, 3.11.5.4, 3.11.5.5 and 3.11.5.6; and
 - (d) Schedules A, B, C, 1 and 2.
- 71 Through these submissions the following amendments were sought:
- 71.1 Ensure that adaptive management is provided for within the provisions of PC1, and that its ability to be utilised as a tool to manage uncertainty and change through the Stages is recognised as a suitable means to implement the 'precautionary approach';
- 71.2 A pathway exists within the provisions of PC1 to allow for sub-catchment management resource consents (to be applied for by an 'enterprise');
- 71.3 Clearer direction given within the provisions of PC1, on the engagement and process that will occur to identify reductions in diffuse discharges that may be required;
- 71.4 Broader consideration of the factors that influence contaminant losses when considering limits;
- 71.5 Flexibility should be allowed when managing contaminants via a mitigation approach and adaptive management;
- 71.6 Maintaining a permitted pathway for specific low contaminant loss farming activities;

71.7 To allow for resource consents for farming activities to be applied for in advance of the priority dates as stipulated in Rule 3.11.5.4; and

71.8 Increased emphasis of the FEP within PC1, and the connection between the action/mitigations required within the FEP to sub-catchment Freshwater Objectives.

Objectives

72 Objective 1 seeks to achieve Restoration and Protection of water quality so that the 80-year Freshwater Objectives and Limits/Targets as defined in Table 3.11-1 are achieved.

73 Objective 3 is primarily focused on achieving the Short-Term improvements in water quality i.e. 10% of the of the required change between current water quality and the 80-year water quality Objectives as defined in Short-Term Freshwater Objectives and Limits/Targets in Table 3.11-1.

74 Evidence from Dr Neale notes that in order to be able to achieve the 80-Year FWOs and therefore achieve Objective 1, it is critical that Objective 3 be achieved by 2026. Therefore the actions required to achieve the Short-Term FWOs should be brought forward.

Policies

75 The focus of this suite of policies are the reductions required to achieve Table 3.11-1.

76 The policies as notified in my view have poor connection between the provisions designed to manage diffuse discharges and the achievement of the FWOs in Table 3.11-1 and in turn Objectives 1 and 3.

Policy 1

77 Policy 1 is responsible for setting out the priority actions required to manage all four contaminants to first achieve the Short-Term FWOs and secondly the 80 Year FWOs.

78 As discussed previously the most practicable way to achieve reductions in diffuse discharges, sufficient to achieve the Short-term Freshwater Objectives in the timeframe stipulated, is by requiring all farming practices to determine Vulnerable Land and suitable mitigations, timely implementation of FEPs and the exclusion of stock from waterways.

- 79 Policy 1 needs to be clear as to how land use is to be managed to achieve the Short-Term FWO's. This includes:
- 79.1 Implementation of FEP's;
 - 79.2 Identification of Vulnerable land, and suitable mitigating actions;
 - 79.3 Stock exclusion from water bodies;
 - 79.4 Direction on how low risk activities are enabled through permitted activities; and
 - 79.5 Direction on how Farming activities will need to respond when seeking consent in sub-catchments not achieving their FWOs.
- 80 Policy 1 also needs to provide direction that via rules, Farming activities are required to demonstrate how the activity will contribute to the achievement of both the Short Term and 80-year Freshwater Objectives in the sub-catchment as listed in Table 3.11-1.

Policy 2

- 81 The tailored approach relates partly to the preparation and implementation of FEPs. The policy as notified is too subjective when considering what actions are required. This policy needs to provide clear guidance on the various considerations that will be before Farm Environment Planners and resource management decision makers.
- 82 To do this I propose amending the policy to identify the tailored actions that are required. The actions and mitigations to be connected to the achievement of the FWOs for catchments and sub-catchments should include:
- 82.1 Identification of Vulnerable Land and suitable mitigation actions;
 - 82.2 Implementation of FEPs; and
 - 82.3 Stipulating the assessment criteria for a FEP;
 - 82.4 Clear direction on what consent applications for a sub-catchment or sector scheme consent may require.
- 83 Strategy (i) of the Vision and Strategy requires the *“development, recognition and promotion of best practice methods for restoring and protecting the health and wellbeing of the Waikato River”*.

Policy 2 would appear to be the most suitable location to include reference to this requirement, ensuring that when FEPs are seeking to restore and protect, that they include actions and mitigations reflecting best practice methods.

- 84 WPL has submitted that PC1 includes the ability to manage land use via a sub-catchment resource consent. I recommend the inclusion of this within Policy 2 as this policy already provides for approaches tailored to the property, enterprise or industry/sector scheme.
- 85 The ability for legal entities to obtain a resource consent for a sub-catchment to achieve its Freshwater Objectives has significant benefits, given the spatial variation of land and its contribution to the sub-catchment water quality, a sub-catchment approach could allow a more targeted approach relative to the strengths and weaknesses inherent in the land.
- 86 The Reporting Officer has previously referred to the 'Whole catchment' view from Strategy 9 of the Vision and Strategy and considers this view is further fortified by the 2017 amendments to the NPS-FW. He considers this concept to be opposed to a sub-catchment consent approach.
- 87 In paras 64-67 of his Supplementary Evidence, Mr Conland discusses the strengths of managing a whole catchment via its parts. I agree with Mr Conland's evidence, specifically para 65.

“The implication in the Section 42A Report at paras 137, 142 and 143 that the river is an indivisible unit is true in both the metaphysical and physical sense – but is not appropriate or practicable in a resource management context where both the sub-catchments and whole river are equally important in delivering overall river health.”

- 88 The economic benefit from a sub-catchment approach is likely to be an incentive in its own. Targeting the money and effort to specific spatially defined areas for maximum impact on water quality would reduce the burden of a blanket approach.
- 89 To further support a sub-catchment framework, an adaptive management and mitigation approach is required. The investigation and identification of mitigations relative to Freshwater Objectives being sought will need to be determined via a pre-determined process, and the required actions committed to within a FEP.

Policy 3A

- 90 Policy 3A as recommended by the Reporting Officer relates to the Certified Industry Sector Scheme.

- 91 A number of submitters including WPL have express concern about the legality of the Certified Industry Scheme provisions as notified. In my view, these concerns could be overcome by providing a consent pathway for industry or sector schemes under PC1 as restricted discretionary activities.
- 92 With some amendments I consider that the policy would support a consenting pathway.
- 93 Policy 3A could be folded into Policy 2.

Policy 4

- 94 With the incorporation of direction for permitted activities into Objective 1, Policy 4 can be used to set criteria for consent terms (duration).
- 95 This is consistent with Policy 4 as proposed by the Reporting Officer in the Section 42A Report.
- 96 Given the long-term staged approach to achieving restoration and protection, clarity around what influences consent terms would assist both resource users and decision makers. Clear direction to applicants that a consent application able to show a pathway to achieving the Short Term and 80-year Freshwater Objectives in their sub-catchment will receive a longer consent term would be a reward for the effort required to demonstrate such a result.
- 97 The policy as proposed attempts to set a presumption that further reductions will be required in order to achieve a further consent. This is to replace the requirement of having to review consents in order to achieve any staged reductions.
- 98 Alternatively, adaptive management utilised within a consent via the FEP could provide certainty for both parties.
- 99 This would give the ability to require changes to land use practices and intensity as a direct response to environmental monitoring and predetermined triggers without a formal review process, potentially reducing the burden on WRC and ensuring the achievement of Objectives 1 and 3 are not jeopardised.

Policy 8

- 100 Policy 8 relates to the dates stipulated in Rule 3.11.5.4, which defines the use of land as a permitted activity within specific sub-catchments until certain dates.

- 101 Policy 8 as notified contains direction to prioritise the management of land and water resources via the prioritisation set out in Table 3.11-2.
- 102 As identified in Dr Neale's and Mr Williamson's evidence in order to achieve Objectives 1 and 3 there is a requirement to act immediately. They both consider that actions within the first 10 years (2016-2026) are critical.
- 103 The most important actions to be implemented via PC1 to achieve Objective 3 are:
- 103.1 The preparation and implementation of Farm Environment Plans;
- 103.2 Identification of Vulnerable Land and suitable mitigation actions; and
- 103.3 The exclusion of stock from water bodies.
- 104 The staggered implementation approach between Policy 8 and rules is not conducive to achieving the Short-Term FWO's by 2026 due to it delaying the implementation of FEPs.
- 105 Given the likelihood of further delays before PC1 is operative, I would usually recommend building in an 'implementation buffer' of 2-5 years. However, considering technical evidence this would not achieve the Objectives.
- 106 Further amendments will need to be made to Rule 3.11.5.4. I also recommend amending Schedule C, paragraph 4. This is discussed further under Schedule C later in my evidence.
- 107 The result of these amendments are that by 1 July 2020 Farming activities in all Priority 1 sub-catchments will need to either comply with a permitted activity rule, or prepare a FEP and apply for a consent.
- 108 By 1 January 2022, all remaining Farming activities in Priority 2 and 3 catchments will need either to comply with a permitted activity rule, or prepare a FEP and apply for a consent.

Summary of Policies

- 109 To enable PC1 to implement and achieve Objectives 1 and 3 Policies 1, 2, 3A, 4 and 8 need to articulate how two specific outcomes can be achieved.

- 109.1 First, the way Farming activities should be evaluated and managed to be able to achieve the Short-Term Freshwater Objectives.
- 109.2 Secondly, the considerations that need to be included in any resource management decisions that may influence the future ability of the 80-year Freshwater Objectives being achieved through a staged approach.
- 110 The policies as notified do not in my view have enough emphasis on the actions required, the requirement to act immediately and the connection to the FWOs in Table 3.11.1. Policies 1, 2, 3A, 4 and 8 as notified, in my opinion, are not (unless amended) the most effective in implementing and achieving Objectives 1 and 3.
- 111 Considering Dr Neale's evidence I consider that through my proposed amendments the policies can achieve the Objectives, provided they are able to be given effect to immediately (by 2020 in the case of land in Priority 1 sub-catchments).

Rules

- 112 The relevant Rules under "Making Reductions" include:
- 112.1 Rule 3.11.5.1;
- 112.2 Rule 3.11.5.2;
- 112.3 Rule 3.11.5.4;
- 112.4 Rule 3.11.5.5 (Block 3 Hearing);
- 112.5 Rule 3.11.5.6.

Rule 3.11.5.1 and Rule 3.11.5.2

- 113 Rule 3.11.5.1 provides as a permitted activity for small and low intensity farming activities undertaken on a single property.
- 114 WPL submitted that Rule 3.11.5.1 should be retained as notified or amended by similar wording to like effect.
- 115 This provision is consistent with policies that are seeking to provide permitted activities for low intensity/low risk farming activities.
- 116 I also agree with the concept of the Reporting Officer in the Section 42A Report to combine both Rules 3.11.5.1 and 3.11.5.2 into one rule. As discussed previously under the heading of NRP I also

agree with the Reporting Officer that a NRP should not be a point of compliance.

- 117 This leaves possible controls on a permitted activity such as:
- 117.1 Stocking rate, type of stock, slope, area/type of cropping, fertiliser records and winter grazing as conditions of a permitted activity.
- 117.2 The matter of property size versus risk appears a common point of difference between the various regional councils with land use rules to control diffuse discharges. Four to 10 hectares does seem a common limit, requiring some degree of OVERSEER based reference to confirm compliance with a prescribed limit.
- 117.3 20 Hectares, whilst considerably larger, seems to be a common size in PC1 at which anything over this size requires an additional measure of control under FEPs.
- 118 I recommend deleting Rule 3.11.5.1, and partially adopting the Reporting Officers amendments to Rule 3.11.5.2, with a minor amendment capping the property size at 20 ha. Properties above 20 ha should in my view be regulated as controlled activities requiring FEP's.

Rule 3.11.5.3

- 119 Rule 3.11.5.3 provides a permitted activity for farming activities with a Farm Environment Plan under a Certified Industry or Sector Scheme. I agree generally with the recommendation in the Section 42A Report that Schemes should now be provided for as restricted discretionary activities and I propose a new Rule 3.11.5.6C to provide an appropriate consenting pathway.

Rule 3.11.5.4

- 120 As per my evidence in relation to Policy 8, the dates currently stipulated in Rule 3.11.5.4 for the priority catchments are not conducive to achieving the Short-Term Freshwater Objectives in Table 3.11-1, and in turn achieving Objective 3.
- 121 Rule 3.11.5.4 as notified is a permitted activity until the implementation dates for the priority catchments. FEPs cannot be required via a permitted rule, FEPs can only be required through a rule requiring a resource consent.
- 122 In order to achieve both Objectives 1 and 3, I propose to bring the dates forward and to amend how the consent "trigger" works so that resource is required for:

(a) Priority 1 sub-catchments **by** 1 July 2020.

(b) Priority 2 and 3 sub-catchments **by** 1 July 2022.

123 Additional amendments have been made (see my Appendix 1) such that the matters of control are:

123.1 Conform with Schedule A;

123.2 Produce a NRP;

123.3 Conform with Schedule C;

123.4 Produce a FEP; and

123.5 Determine Vulnerable land and suitable mitigating actions.

124 As notified this rule contains both a permitted rule and a controlled rule incorporated into one. I agree with the Reporting Officer that the creation of an interim rule to authorise Farming activities is appropriate. In particular, including Rule 3.11.5.1A removes the need for any discharge rules because it confirms that water quality is being managed via land use rules under s 30(1)(c)(ii) of the RMA.

125 I have included my amendments to these rules in Appendix 1 of my evidence.

126 The result of these amendments is that by 2022 all Farming activities will need to have either complied with the permitted activity rule, or prepared a FEP and applied for a consent.

Rule 3.11.5.6

127 Rule 3.11.5.6 is a Restricted Discretionary Rule that provides for the consideration of Farming activities that do not comply with the permitted or controlled activity rules.

128 The rule as notified retains discretion over the matters directly related to achieving Objectives 1 and 3 as well as implementing the policies as amended in Appendix 1 of my evidence..

129 The framework of Rule 3.11.5.6 is suitable to implement Policies 1(b)(iii) and (iv) as amended.

130 Amending Rule 3.11.5.6 to include the ability to authorise properties, enterprises, sub-catchments or sector schemes would provide a consenting pathway for various scales and forms of land use whilst ensuring the achievement of the Short-Term and 80-year Freshwater Objectives are achieved.

- 131 The ability to manage land and its contaminant losses via a sub-catchment resource consent provides the most integrated way to achieve the Vision and Strategy.
- 132 The Reporting Officer in para 295 discusses the sub-catchment approach in comparison to the “Whole catchment’ view from Strategy (9) of the Vision and Strategy and considers this view is further fortified by the 2017 amendments to the NPS-FW. The Officer considers this concept to be opposed to a sub-catchment consent/management approach.
- 133 The Reporting Officer recommends in para 295,
“that both Policy 1 and 2 be amended to specifically recognise the catchment wide view as well as the sub-catchments”.
- 134 I agree with this recommendation as reflected in the wording of Objectives 1 and 3 (“within the Waikato and Waipa River Catchments and their sub-catchments”) in Appendix 1 of my evidence.

Summary of Rules

- 135 Rules 3.11.5.1 and 3.11.5.2 as notified are generally consistent with Policy 1, Rule 3.11.5.2 has implementation issues and in my opinion requires amending.
- 135.1 The Reporting Officer has proposed an amended rule ‘3.11.5.2 Permitted Activity Rule – Low intensity farming’, this rule is to replace both 3.11.5.1 and 3.11.5.2. I consider the rule as proposed suitable pending the removal of;
- (a) The requirement to complete an NRP for the property:
- ~~3.11.5.2 C (3) a. a Nitrogen Reference Point is produced for the property in conformance with schedule B; and~~
- And
- (b) The requirement to utilise software to determine diffuse discharges:
- ~~3.11.5.2 (g). 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 Council, and~~

135.2 Rule 3.11.5.3 is to be deleted and replaced by my suggested Rule 3.11.5.6C.

135.3 The proposed amendments to Rule 3.11.5.4 will help ensure the achievement of Objectives 1 and 3.

135.4 In addition, the creation of Rule 3.11.5.1A will enable land use in the interim until a consent application is required to be lodged. This rule in conjunction with the amended rule 3.11.5.4 will also allow farming activities to apply earlier.

135.5 Rule 3.11.5.5. is to be considered in Block 3.

135.6 Amending Rule 3.11.5.6 into three separate rules to consider:

- (a) Properties and enterprises Rule 3.11.5.6A;
- (b) Sub-catchments Rule 3.11.5.6B; and
- (c) Sector schemes Rule 3.11.5.6C.

136 The amended rules in Appendix 1 of my evidence implement the objectives and policies of PC1 in a more efficient manner, enabling the achievement of the Short-Term FWO's of Table 3.11.1.

137 Providing for Farming activities to be consented at scale via enterprise, sub-catchment, and sector scheme restricted discretionary activity resource consents will streamline process under PC1 and address the concern of WRC that a large number of consents would otherwise be required.

Schedule B

138 WPL submitted that Schedule B should be amended:

138.1 PC1 as notified requires all consent applicants to use OVERSEER to calculate N losses resulting from farming practices. The ability to utilise an alternative DST is currently at the discretion of the CEO of WRC. This discretion is void of any description, criteria or standard that a DST needs to satisfy and is inconsistent with other activities that require complex models to describe likely environmental effects.

138.2 An alternative DST should be able to be used to prepare an FEP for a consent application and be subject to the same scrutiny that any other form of supporting information would be.

138.3 I agree with the Reporting Officer for the reasons given that the removal of Table 1 from Schedule B would assist in implementing the schedule over time.

- 139 I have proposed a number of amendments within Schedule B, they are included in my Appendix 1.

Schedule C

- 140 WPL submitted that Schedule C should be retained as notified or amended by similar wording to like effect. As previously discussed under Policy 8, I recommend that the priority dates by which consent applications should be lodged are amended so as to better reflect the requirements of Objective 3.

- 141 I also recommend amending clause 4 of Schedule C to reduce the staggering of stock exclusion by requiring properties operating under the Permitted Activity rules to exclude stock from water bodies as per clause's 1 and 2 by 1 July 2023.

- 142 I also recommend amending clause 5, the final paragraph to:

142.1 "*...no later than 1 July 2023.*"

- 143 As discussed under Policy 8 and Rule 3.11.5.4, by 1 July 2022, all farming activities will need to either comply with a permitted activity rule, or prepare a FEP and apply for a consent. Clause 5 of Schedule C requires compliance with clauses 1 and 2 within 2 years of providing the FEP to Council.

Schedule 1

- 144 Schedule 1 regarding FEPs will be addressed in Block 3. As noted above I will recommend in my Block 3 evidence that Vulnerable land criteria should be included in this schedule. I will also recommend that the content of the additional schedules requested by WPL should be consolidated into this schedule as a consequence of the amendments that I have proposed to the restricted discretionary rules for enterprises, sub-catchments and sector schemes.

Schedule 2

- 145 As noted above, I recommend providing for sector schemes as restricted discretionary activities in my proposed new Rule 3.11.5.6C. The matters for discretion in my draft rule refer to the criteria in Parts A to D of Schedule 2 to ensure that any sector scheme could effectively manage the consent granted. I recommend that these parts of Schedule 2 should be retained as

per the Section 42A Reprt but I recommend that the introductory paras in the schedule should be deleted.

Summary

- 146 As per Dr Neale's evidence there is a real risk of being unable to achieve the Freshwater Objectives, Limits and Targets specified within Table 3.11-1 if action is not taken sooner as opposed to later to improve farming practices.
- 147 The provisions amended as per my Appendix 1, I consider provide an effective way to implement Objectives 1 and 3 and provide the best chance to achieve this within the timeframes stipulated.
- 148 The amended provisions collectively work to achieve the reductions anticipated within the Section 32 Report.
- 149 Policy 1 plays an important part in achieving Objectives 1 and 3, however, the collective suite of policies is pivotal to provide direction and guidance on how to implement the provisions.
- 150 Policy 2, whilst primarily providing direction on how to achieve Objectives 1 and 3 through implementation of FEPs is also useful for providing guidance on the other approaches that can be tailored to each consent.
- 151 The Section 32 Report under the heading E.3.5.5 Summary of effectiveness (p 173) provides six key areas (parts) to assess the effectiveness of the policy package.
- 151.1 Part 1: Contains a valid conclusion that land use provisions in addition to those existing in the operative Waikato Regional Plan are required to implement the Vision and Strategy.
- 151.2 Part 2: Contains a valid conclusion, that the ability to define low risk/low intensity land uses and 'enable' them through permitted activity rules reduces the cost of implementing PC1, but clarifying how that is determined improves the effectiveness of the policies. Further amendments to the permitted rules will also be required to ensure they are implementable.
- 151.3 Part 3: As a result of emending timeframes to achieve stock exclusion from water ways within the catchment and reflecting this within the relevant polies, I agree with the conclusions - specifically the requirement for FEPs.
- 151.4 Part 4: I agree with the conclusion that the requirement of FEPs will make a positive contribution to water quality, I consider that significant amendments are required to the

policies to ensure the full benefits can be realised in time to achieve Objective 3 and 1. Amendments to the rules are also required to reflect the changes in policy.

151.5 Part 5: I do not agree with this conclusion in relation to the 75th percentile, as discussed previously I consider the inclusion of the requirement to identify Vulnerable land and determine mitigations combined with all properties in Priority 1 sub-catchments required to prepare FEPs by 2020 as a more effective way to achieve improvements in farming practices and reductions in diffuse discharges. The 75th percentile should therefore be deleted.

151.6 Part 6: I agree that a reference point is required in order to compare a FEP for a property against in order to determine if proposed actions and mitigations are likely to result in reductions of diffuse discharges. As a result of evidence presented on behalf of WPL on OVERSEER, I do not consider that the NRPs have any value when comparing land use practices between different properties, within a Freshwater Management Unit or for setting limits such as the 75th percentile.

152 As notified, I consider that the implementation of the rules and policies would have significant issues.

153 My proposed amendments I believe go some way to addressing these implementation issues, and will also further enable the ability to achieve Objectives 1 and 3.

154 As noted, where relevant some of these amendments have been sourced from the Section 42A Report and incorporated into my evidence.

Topic C1.4 75th Percentile

155 Technical evidence provided on behalf of WPL has stated that through determining Vulnerable Land and suitable mitigations the resultant improvements in land use will deliver reductions in diffuse discharge equal to that anticipated via the 75th percentile.

156 Utilising the RDST to test various scenarios, WPL provided results comparing the projected reductions over time in diffuse discharges from implementing a 75th percentile limit, versus using a Vulnerable land criterion to identify land, its suitable uses and appropriate mitigations.

157 As a result of running the scenario and comparing the results, all technical witnesses presenting evidence on behalf of WPL have provided recommendations within their evidence that the

Vulnerable land criteria delivers better environmental results and should be the preferred tool within PC1.

- 158 I therefore recommend that the 75th percentile as a method to limit the leaching of N within PC1 be removed. This includes the deletion of its definition.
- 159 Removing this method of creating and implementing a limit I believe improves the ability of PC1 to first be implemented, as it no longer requires data from every property before it can be calculated. Nor does it require a subjective workaround with questionable use of discretion to determine an environmental limit through a deeming provision (as recommended in the Section 42A Report.
- 160 Its removal allows the use of an alternative method that is supported by the evidence provided by WPL and is more appropriate to achieving improvements in water quality.

Topic C1.5 Land use change

- 161 Relevant objectives are Objectives 1 and 3.
- 162 PC1 provisions are Policy 6 and Rule 3.11.5.7.
- 163 WPL submitted on both provisions in relation to 'Restricting land use changes'.
- 164 Through these submissions the following outcomes are sought:
- 164.1 Enable land use change where the Stage 1 freshwater objectives are met through adaptive management and mitigation.

Objectives

- 165 Objectives 1 and 3 and were discussed in my Block 1 evidence, and the amended versions are included in **Appendix 1** to this evidence.
- 166 I have previously discussed Objectives 1 and 3, and the importance of acting in a timely manner in order to achieve the Short-Term and 80-year Freshwater Objectives, Limits and Targets in Table 3.11-1 by the dates stated in the Objectives.

Policy 6

- 167 Policy 6 seeks to limit land use change, supporting only change that demonstrates 'clear and enduring decreases'.

- 168 Policy 6 requires the demonstration of further reductions below the existing NRP regardless of the existing farming practice or level of diffuse discharges in the sub-catchment relative to Table 3.11-1.
- 169 The result of Policy 6 when considering a consent application with the plan provisions as notified, is that its premise to grant or decline consent is void of any determination of actual effects on the receiving environment.
- 170 WPL submitted on Policy 6 that effects from land use change should be compared with the sub-catchments Freshwater Objectives in Table 3.11-1 and its ability to achieve them, opposed to a blanket 'must reduce' requirement.
- 171 Para 471 of the Section 42A Report presents a similar view, that any significant land use change needs;

“a rigorous consent process, information about off-site effects and decision making that is able to consider a broad range of effects, including cumulative effects, backed by expertise of scientists and other experts.”

- 172 The Reporting Officer has further recommended the deletion of Policy 6 in the Section 42A Report. The associated parts have been relocated to Policy 1 within the Reporting Officer's amended provisions and also incorporated in the revisions to the rules. As a result, PC1 is now more restrictive.
- 173 I consider Policy one is better suited to providing direction both on the actions required to achieve the Objectives 1 and 3, along with the plan provisions required to implement the actions.
- 174 I agree with the deletion of the content from Policy 6 as recommended by the Reporting Officer, I recommended keeping Policy 6 and replacing the deleted parts with directive criteria for any consent application for land use change.

Rule 3.11.5.7

- 175 Rule 3.11.5.7 controls land use change by identifying 4 forms of land use change and classifies them as requiring consent as a Non-Complying activity until 2026.
- 176 WPL submitted to amend Rule 3.11.5.7 with the inclusion of several additional parts.
- 177 Within the Section 42A Report the Reporting Officer has recommended the removal of most of the text in the rule, keeping the resultant rule as the 'catchall' in the cascade of rules.

- 178 It is my conclusion from the evidence provided by WPL that land use change undertaken in accordance with strict criteria can be achieved whilst still progressing towards the Freshwater Objectives.
- 179 I have therefore proposed a consenting pathway for land use change that allows for the following three pathways:
- 179.1 Where the resultant land use can demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Limits (Total Nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1, it should be provided for as a restricted discretionary activity, under my proposed Rule - 3.11.5.7A.
- 179.2 Where the resultant land use cannot demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Loads (Total nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1, but satisfies Policy 16 it should be provided for as a restricted discretionary activity under my proposed Rule - 3.11.5.7B.
- 179.3 Where the resultant land use cannot demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Loads (Total nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1, and does not satisfy Policy 16 it should be provided for as a non-complying activity under my Rule 3.11.5.7C.
- 180 My proposed amendments to the plan provisions are in Appendix 1 of my evidence.

Summary

- 181 In my view, Policy 6 and Rule 3.11.5.7 as notified were not effects based. The changes to PC1 recommended by the Section 42A Report do not address this concern and are more restrictive than the notified provisions.

Topic C1.6 Definitions

Definitions:

- 182 As a result of the proposed amendments to Schedule B to allow alternative DST's, a change to the definition of 'Nutrient Reference Point' is required.

182.1 The proposed definition is as follows;

Nitrogen Reference Point: The nitrogen loss numbers (units of kg N/ha/year) ~~that is derived from an Overseer use~~

~~protocol compliant Overseer file that describes the property or farm enterprise and farm practices in an agreed year or years developed by a Certified Farm Nutrient Advisor, using an appropriate methodology provided for under Schedule B the current version of the Overseer model (or another model approved by the Council) for the property or enterprise at the “reference” point in time.~~

- 183 The relevant reference point should either be 22 October 2016 or the financial year 2016/2017 to reflect existing use rights under s 20A of the RMA.
- 184 To support the amendments to Schedule B a definition of a DST is required in PC1. WPL submitted the following definition:

Decision Support Tool: *An information and accounting framework that can be used to assist with analysis and decision-making processes within an enterprise (or property) that supports the management of diffuse discharges from properties of nitrogen, phosphorus, sediment and microbial pathogens at a sub-catchment scale.*

TOPIC C3 INDUSTRY SECTOR SCHEMES

- 185 I have discussed Policy 3A previously and have recommended the inclusion of an amended version of the policy as taken from the Section 42A Report.
- 186 I have also discussed my proposed Rule 3.11.5.6C previously which I have included in Appendix 1 of my evidence. This rule is to provide a pathway for sector scheme resource consents and would act to remove a considerable consenting burden on the WRC.

Topic C5 TREATY SETTLEMENT LAND

- 187 Relevant objectives to achieve are Objective 5. PC1 provisions are: Policy 16. WPL generally supports this policy and proposed amendments to Objective 5. My Block 1 evidence recommended changes to Objective 5 to ensure that it will relate to both ancestral land and Treaty settlement land.
- 188 To ensure that these provisions can be implemented I have recommended a new Rule 3.11.5.7B that provides for land use change as a restricted discretionary activity where Policy 16 is satisfied. In my view, this provides a more flexible consenting pathway for Treaty settlement land.
- 189 Additionally, Mr Conland also demonstrates in his evidence how sub-catchment scale consenting for Farming activities under my

proposed new Rule 3.11.5.6B could also facilitate the development of Treaty settlement land while meeting the FWOs in Table 3.11-1.

TOPIC C6 URBAN/POINT SOURCE DISCHARGES

- 190 WPL made submissions on Policies 10, 11, 12 and 13 to provide a level playing field for point source and diffuse discharges. This was motivated primarily by the need to provide guidance for consent duration for diffuse discharges.
- 191 This matter has largely been resolved by the amendments to proposed to Policy 4 in the Section 42A Report and in my Appedix 1 where I recommend that land use consents for Farming activities should be granted for terms not exceeding 25 years.

SECTION 42A REPORT AND DISCHARGE RULES

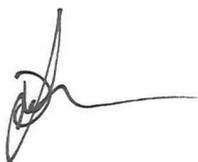
- 192 The Section 42A Report recommends that the hybrid rules for Farming activities should be amended. They now provide for controls that regulate land use. In my view, this policy choice is consistent with WRC's functions under s 30(1)(c)(ii) of the RMA in controlling land use for the purposes of maintaining and enhancing water quality in water bodies.
- 193 The Reporting Officer also recommends that two new rules regulating diffuse discharges as permitted and discretionary activities should be included in PC1. In my view, there should be no need for such rules because the controls on land use that require the FWOs in Table 3.11-1 to be met by the actions and mitigations in FEPs should adequately safeguard water quality and ensure that Objectives 1 and 3 are implemented.
- 194 From a planning perspective it is unclear how s 70 of the RMA (referenced in the new permitted activity rule) could be complied with in practice. I note that the Reporting Officer made a similar observation in the Block 1 Section 42A Report in relation to the permitted activity rule for industry schemes.
- 195 I have considered whether the permitted activity rule from Chapter 3.10 could be used as an alternative. But I note that implementing that rule depends on compliance with other rules in the operative plan relating to farm discharges. Those rules now operate as point source rules (as a result of the PC1 consequential amendments). The planning framework is now very different so amending the rule in this way does not in my view appear to be an option.
- 196 The land use rules now provided should be effective in controlling the effects of land use activities and ensuring that water quality is maintained and enhanced. The proposed discharge rules are in my view not required and should be deleted.

CONCLUSIONS

- 197 The policies, methods, and rules in PC1 as notified will not achieve Objective 3 when implemented and should be amended to meet this Objective by 2026 (because early action in the first 10-years are critical for the success of PC1).
- 198 The 75th percentile nitrogen leaching value should be deleted because its implementation depends on full knowledge that will not be available during the plan period.
- 199 Land vulnerability (temporal and spatial) should be the driving criteria for land use controls in PC1.
- 200 Other DSTs should be available for use under PC1 (without CEO approval) based on the PCE criteria.
- 201 FEPs should be used as the primary risk assessment tool for all 4 attributes (i.e. contaminants).
- 202 Consenting at scale for enterprises, sub-catchments and sector schemes should be provided for to streamline consenting under PC1. Any legal person should be able to apply for (managing) them. The ability to manage land and its contaminant losses via a sub-catchment resource consent provides the most integrated way to achieve the Vision and Strategy.
- 203 Land use change constraint as notified is unlikely to be efficient, and Policy 6 and Rule 3.11.5.7 should be amended to provide for land use change where the FWOs for the sub-catchment are met under Table 3.11-1.
- 204 I therefore recommend the following changes to PC1:
- 204.1 Amendments to the rules and policies to provide a pathway for enterprise, sub-catchment and sector scheme resource consents;
 - 204.2 Amendments to the rules and policies to provide a restricted discretionary activity pathway for land use change;
 - 204.3 Amendments to the provisions to enable the achievement of Objective 3 (Table 3.11-1) by 2026;
 - 204.4 Adaptive management should be included within the policies and rules so that mitigations and actions can be monitored within resource consents;

204.5 A clearly defined ability to utilise other DSTs alongside or instead of OVERSEER, to develop NRPs and inform land use decisions within resource consents;

204.6 The actions and mitigations within FEPs should be more focused on achieving or maintaining the Freshwater Objectives of the sub-catchment.

A handwritten signature in black ink, appearing to read 'Dwayne Connell-McKay', with a long horizontal line extending to the right.

Dwayne Connell-McKay

3 May 2019

APPENDIX

APPENDIX 1

Objectives from Block 1

Objective 1

The 80-year freshwater objectives from Table 3.11-1 are met by the restoration and protection of ~~maintaining or improving~~ freshwater quality within the Waikato and Waipa River catchments and their sub-catchments by 2096.

Objective 2

Waikato and Waipa communities and their economy benefit from the restoration and protection ~~maintenance and improvement~~ of water quality in the Waikato and Waipa Rivers' sub-catchments, which enables the people and communities to continue to provide for their social, economic and cultural wellbeing.

Objective 3

The Short-Term freshwater objectives from Table 3.11-1 are met by the restoration and protection of freshwater quality within the Waikato and Waipa River catchments and their sub-catchments by 2026.

Objective 4

A staged approach to change will be provided via policies, methods, and rules that enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing while:

- a. The Short Term and 80-year water quality objectives from Table 3.11-1 are met by maintaining or improving freshwater quality within the Waikato and Waipa River catchments and their sub-catchments; and
- b. Recognising that further contaminant reductions will be required within in some sub-catchments by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.

Objective 5

Tangata Whenua values are integrated into the co-management of the rivers and other water bodies within the catchment such that:

- a. tangata whenua have the ability to:
 - i. Manage their own lands and resources, by exercising mana whakahaere, for the benefit of their people; and
 - ii. Actively sustain a relationship with ancestral land and with the rivers and other water bodies in the catchment; and
- b. new impediments to the flexibility of the use of both tangata whenua ancestral lands and land returned via treaty settlements are minimised; and

- c. improvements in the rivers' water quality and the exercise of kaitiakitanga increase the spiritual and physical wellbeing of iwi and their tribal and cultural identity.

Objective 6

The Short Term and 80-year freshwater objectives from Table 3.11-1 are met within the water entering the Whangamarino Wetland by 2026 and 2096 respectively.

Amended Policies

Policy 1: Land use management ~~Manage diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens/~~Te Kaupapa Here 1: Te whakahaere i ngā rukenga roha o te hauota, o te pūtūtae-whetū, o te waiparapara me te tukumate ora poto

Manage land use to improve the practices of Farming activities and achieve reductions in diffuse ~~Manage and require reductions in sub-catchment wide~~ discharges of nitrogen, phosphorus, sediment and microbial pathogens, by within the catchments and sub-catchments to achieve:

- a. The Short-Term Freshwater Objectives by: Enabling activities with a low level of contaminant discharge to water bodies provided those discharges do not increase;
and
 - i. Timely implementation of Farm Environment Plans and stock exclusion from water bodies; and
 - ii. Establishing of a Nitrogen Reference Point for properties, enterprises, sub-catchments or sector schemes; and
 - iii. Identifying Vulnerable land, the appropriate use of it and any mitigating actions; and
 - iv. Providing direction via rules that Farming activities in sub-catchments not meeting the Short-Term Freshwater Objectives will need to improve their practices relative to the water quality improvement required within the sub-catchment as per Table 3.11-1; and
 - v. Providing permitted activity rules for land use activities of low intensity and with a low risk of diffuse discharge of Nitrogen, Phosphorous, Sediment and Microbial pathogens; and
 - vi. Requiring resource consents for activities that do not comply with permitted activity rules.
- b. The 80-Year Freshwater Objectives by: Requiring farming activities with moderate to high levels of contaminant discharge to water bodies to reduce their discharges; and
 - i. Providing direction via rules that Farming activities in sub-catchments not meeting the 80-year Freshwater Objectives will need to improve their practices proportionate to the water quality improvement required within the sub-catchment as per Table 3.11-1; and

- ii. Providing rules for Farming activities at property, enterprise, sub-catchment or sector schemes level where the activity can demonstrate the achievement of both the Short Term and 80-year Freshwater Objectives within the sub-catchment as listed in Table 3.11-1; and
- iii. Providing rules to consider land use change at a property, enterprise, sub-catchment or sector schemes scale where the resultant land use facilitates the achievement of the 80-Year Freshwater Objectives within the sub-catchment as listed in Table 3.11-1.

Policy 2: Tailored approaches ~~to managing to reducing diffuse discharges from Farming activities/Te Kaupapa Here 2: He huarahi ka āta whakahāngaihia hei whakaiti i ngā rukenga roha i ngā mahinga pāmu~~

~~Manage and require reductions in sub-catchment wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens from farming activities on properties and enterprise by:~~

- a. ~~Taking a~~ A tailored, risk based approach to managing land use, including adaptive management, to reduce ~~define mitigation actions on the land that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, with the mitigation actions to be specified in a Farm Environment Plan either associated with a resource consent, or in specific requirements established by participation in a Certified Industry Scheme; and at a property, enterprise, sub-catchment or sector schemes scale will require:~~
 - a. Identification of suitable mitigating actions appropriate to the land, its use, risk assessment and the relevant Freshwater Objectives for the catchment and sub-catchment as determined in Table 3.11-1, such that:
 - i. The result of the mitigating actions should be proportional to the scale of improvement required in the sub-catchments water quality; and
 - ii. The mitigating actions should reflect best practice methods.
 - b. Identification of Vulnerable land and the appropriate use of it and any mitigating actions necessary within the property, enterprise, sub-catchment or sector schemes;
 - ~~Requiring the same level of rigour in developing, monitoring and auditing of mitigation actions on the land that is set out in a Farm Environment Plan, whether it is established with a resource consent or through Certified Industry Schemes; and~~
 - c. The implementation of mitigating actions identified in a Farm Environment Plan by specified dates;
 - ~~Establishing a Nitrogen Reference Point for the property or enterprise; and~~
 - d. ~~Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment; and~~
 - Farm Environment Plans to:
 - i. Set out clear, specific and time framed actions; and

- ii. Take a tailored, risk-based approach to define mitigating actions that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to address Table 3.11-1; and
 - iii. Require monitoring and auditing; and
 - iv. Be flexible and able to be updated so that continuous improvement, new technologies and mitigation practices can be adopted, such that where necessary diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens further reduce to address Table 3.11-1; and
 - v. Use an appropriate Decision support tool in accordance with Schedule B.
- e. ~~Requiring stock exclusion to be completed within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2026.~~
- Consent applications at a sub-catchment scale should demonstrate that both the Short Term and 80-Year Freshwater Objectives and Loads as listed in Table 3.11-1 will be achieved by;
- i. Determining the sub-catchment load limits relating to total nitrogen and total phosphorus; and
 - ii. Providing the calculated contribution to the sub-catchment load from the proposed land use; and
 - iii. Providing mitigating actions and the committed timeframes required to achieve the load limits.
- f. Consent applications at a sector scheme scale should demonstrate that both the Short Term and 80-Year Freshwater Objectives as listed in Table 3.11-1 will be achieved by;
- i. Providing Farm Environment Plan(s) for all members of a scheme; and
 - ii. Require all Farm Environment Plan(s) to include an identification of Vulnerable land and appropriate use of it, including any mitigating actions necessary within the property; and
 - iii. Providing the calculated contribution to the sub-catchment load from the proposed land use; and
 - iv. Providing mitigating actions and the timeframes required to achieve the load limits.

Policy 3A: Sector schemes

Enable sector schemes to prepare and monitor the implementation of Farm Environment Plan (s) by requiring the sector scheme manager to report at least annually on the implementation of Farm Environment Plans managed under the scheme.

Policy 4: ~~Enabling activities with lower discharges to continue or to be established while signalling further change may be required in future~~ Land use consent duration /Te Kaupapa Here 4: Te tuku kia haere tonu, kia whakatūria rānei ngā tūmahi he iti iho ngārukenga, me te tohu ake ākuanei pea me panoni anō hei ngā tau e heke mai ana

~~Manage sub-catchment wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, and enable existing and new low discharging activities to continue provided that cumulatively the achievement of Objective 3 is not compromised. Activities and uses currently defined as low dischargers may in the future need to take mitigation actions that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens in order for Objective 1 to be met.~~

To grant resource consents for Farming activities a term not exceeding 25 years according to the ability of the property, enterprise, sub-catchment or sector scheme to:

- i. Improve the practices of Farming activities to achieve reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens relevant to the water quality improvement required within the sub-catchment as per Table 3.11-1; and
- ii. Apply adaptive management methods to manage the Farming activities including, identified mitigating actions and their associated diffuse discharges.

Policy 5: Staged approach/Te Kaupapa Here 5: He huarahi wāwāhi

~~Recognise that achieving the water quality attribute^ targets^ set out in Table 11-1 will need to be staged over 80 years,~~

~~to minimise social disruption and allow for innovation and new practices to develop, while making a start on reducing discharges of nitrogen, phosphorus, sediment and microbial pathogens, and preparing for further reductions that will be required in subsequent regional plans.~~

To recognise that:

- a. Persons, businesses and communities will need to contribute to achieving the Freshwater Objectives in Table 3.11-1; and
- b. Changes in Farming practices need to start immediately; and
- c. The rate of change will need to be staged over the coming decades to minimise social, economic and cultural disruption and enable innovation and new practices to develop; and
- d. Responding to the reasonably foreseeable effects of climate change will mean that different regulatory and non-regulatory responses may be needed in future; and
- e. When considering resource consents, adaptive management is an appropriate method to include within consent conditions to manage risk(s) when seeking to restore and protect water quality in a staged manner; and
- f. The management of Farming activities and land use change through the stages is best achieved by requiring resource consent applications to include an appropriate assessment of risk and uncertainty based on sound adaptive management criteria.

Policy 6: Restricting land use change/Te Kaupapa Here 6: Te here i te panonitanga ā-whakamahinga whenua

~~Except as provided for in Policy 16, land use change consent applications that demonstrate an increase in the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens will generally not be granted.~~

~~Land use change consent applications that demonstrate clear and enduring decreases in existing diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens will generally be granted.~~

- a. Land use change resource consent applications that demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Limits (Total Nitrogen and Total Phosphorous) in Table 3.11-1, or otherwise complies with policy 16, shall generally be granted.
- b. Land use change resource consent applications that cannot demonstrate the ability to achieve the Freshwater Objectives, Targets and Limits (Total Nitrogen and Total Phosphorous) in Table 3.11-1, or comply with Policy 16, shall require close and careful assessment as a Non-Complying Activity.
- c. All applications should demonstrate application of appropriate adaptive management methods.

Policy 8: Prioritised implementation/Te Kaupapa Here 8: Te raupapa o te whakatinanatanga

~~Prioritise the management of land use management of land and water resources by implementing Policies 2, 3 and 9, and in accordance with the prioritisation of areas set out in Table 3.11-2. Priority areas include:~~

- ~~a. Sub-catchments where there is a greater gap between the water quality targets[^] in Objective 1 (Table 3.11-1) and current water quality; and~~
- ~~b. Lakes Freshwater Management Units[^]; and~~
- ~~c. Whangamarino Wetland.~~

~~In addition to the priority sub-catchments listed in Table 3.11-2, the 75th percentile nitrogen leaching value dischargers will also be prioritised for Farm Environment Plans.~~

Policy 10: Provide for point source discharges of regional significance/Te Kaupapa Here 10: Te whakatau i ngā rukenga i ngā pū tuwha e noho tāpua ana ki te rohe

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

- a. Continued operation of regionally significant infrastructure; and
- b. Continued operation and development of regionally significant industry and primary production.

Policy 11: Application of Best Practicable Option and mitigation or offset of effects to point source discharges/Te Kaupapa Here 11: Te whakahāngai i te Kōwhiringa ka Tino Taea me ngā mahi whakangāwari pānga; te karo rānei i ngā pānga ki ngā rukenga i ngā pū tuwha

- ~~a. Require any person undertaking a point source discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato and Waipa River catchments to adopt the Best Practicable Option to avoid or mitigate the adverse effects of the discharge preferably within the same sub-catchment, at the time a resource consent application is decided. Where it is not practicable to avoid or mitigate all adverse effects, an offset measure may be proposed in an alternative location or locations to the point source discharge, for the purpose of ensuring positive effects on the environment to lessen any residual adverse effects of the discharge(s) that will or may result from allowing the activity provided that the:~~
- ~~b. When further considering the appropriateness of an offset, the location(s) of the offset and its ability to offset adverse effects within the receiving sub-catchment also need to be considered.~~
- ~~c. Further considerations include:~~
 - ~~a. i. Primary discharge does not result in any significant toxic-adverse effects effect on the environment at the point source discharge location; and~~
 - ~~b. ii. Offset measure is for the same contaminant; and~~
 - ~~c. iii. Offset measure occurs preferably within the same sub-catchment in which the primary discharge occurs and if this is not practicable, then within the same~~

~~Freshwater Management Unit or a Freshwater Management Unit located upstream, and~~

- d. iv. Offset measure remains in place for the duration of the consent and is secured by consent condition.

Policy 12: Additional considerations for point source discharges in relation to water quality targets/Te Kaupapa Here 12: He take anō hei whakaaro ake mō ngā rukenga i ngā pū tuwha e pā ana ki ngā whāinga ā-kounga wai

Consider the contribution made by a point source discharge to the nitrogen, phosphorus, sediment and microbial pathogen catchment loads and the impact of that contribution on the likely achievement of both the Short-Term Freshwater Objectives and Loads in Table 3.11-1 ~~the short term targets^ in Objective 3~~ or the progression towards the 80-year Freshwater Objectives and Loads in Table 3.11-1 ~~targets^ in Objective 4~~, taking into account:

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

Policy 13: Point sources consent duration/Te Kaupapa Here 13: Te roa o te tukanga tono whakaaetanga mō te pū tuwha

~~When determining an appropriate duration for any consent granted~~ When considering a consent term for a discharge permit consider the following matters:

- a. ~~A consent term exceeding 25 years, where the applicant demonstrates the approaches set out in Policies 11 and 12 will be met~~ The appropriateness of a longer consent duration, where the applicant demonstrates that the discharge is consistent with achieving both the Short-Term and 80-Year Freshwater Objectives for the sub-catchment in Table 3.11-1;
- b. The magnitude and significance of the investment made or proposed to be made in contaminant reduction measures and any resultant improvements in the receiving water quality; and
- c. The need to provide appropriate certainty of investment where contaminant reduction measures are proposed (including investment in treatment plant upgrades or land based application technology).

Policy 16: Flexibility for development of land returned under Te Tiriti o Waitangi settlements and multiple owned Māori land/Te Kaupapa Here 16: Te hangore o te tukanga mō te whakawhanaketanga o ngā whenua e whakahokia ai i raro i ngā whakataunga kokoraho o Te Tiriti o Waitangi me ngā whenua Māori kei raro i te mana whakahaere o te takitini

For the purposes of considering land use change applications under Rule 3.11.5.7 land use change that enables the development of tangata whenua ancestral lands and land returned via Treaty Settlements shall be managed in a way that recognises and provides for:

- a. The relationship of tangata whenua with their ancestral lands; ~~and~~
- b. The exercise of kaitiakitanga; ~~and~~
- c. The creation of positive economic, social and cultural benefits for tangata whenua now and into the future; and
- d. Taking into account the achievement of the Freshwater Objectives in Objective 3.

Amended Rules

~~Rule 3.11.5.1 – Permitted Activity Rule – Small and Low Intensity farming activities~~

~~The use of land for farming activities (excluding commercial vegetable production) and the associated diffuse discharge~~

~~of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those~~

~~contaminants entering water is a permitted activity subject to the following conditions:~~

- ~~1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and~~
- ~~2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and~~

~~Either:~~

- ~~3. The property area is less than or equal to 4.1 hectares; and~~
- ~~4. The farming activities do not form part of an enterprise being undertaken on more than one property; or~~

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

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

Rule 3.11.5.1A Interim Permitted Activity Rule – Farming Activities

Farming Activities that will ultimately require resource consent under Rules 3.11.5.2, 3.11.5.4, 3.11.5.6A, 3.11.5.6B, and 3.11.5.6C:

1. For the use of land in Priority 1 sub-catchments by 1 July 2020; or
2. For the use of land in Priority 2 and Priority 3 sub-catchments by 1 July 2022.

Are in the interim permitted activities subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
2. No Commercial vegetable production occurs.

Rule 3.11.5.2 - Permitted Activity Rule —Small and Low Intensity Farming activities ~~Other farming activities~~

~~The use of land for Farming activities (excluding commercial vegetable production) and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water where the property area is greater than 4.1 hectares, and has more than 6 stock units per hectare or is used for arable cropping, is a permitted activity subject to the following conditions:~~

- ~~1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and~~
 - ~~2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C and Conditions 3(e) and 4(e) of this Rule; and~~
 - ~~3. The Farming activities do not form part of an enterprise or a sector scheme ;~~
 - ~~4. No Commercial vegetable production occurs; and~~
 - ~~5. No feedlots or sacrifice paddocks are used on the property; and~~
 - ~~6. No more than 5% of the land is used for cropping, including winter forage crops; and~~
 - ~~7. The property is less than or equal to 20 hectares; and~~
- ~~3. Where the property area is less than or equal to 20 hectares:~~
- ~~a. The farming activities do not form part of an enterprise being undertaken on more than one property; and~~
 - ~~b. Where the land is:
 - ~~i. used for grazing livestock, the stocking rate of the land is no greater than the stocking rate of the land at 22 October 2016; or~~
 - ~~ii. not used for grazing livestock, the land use has the same or lower diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens as the land use at 22 October 2016; and~~~~
 - ~~c. Upon request, the landowner shall obtain and provide to the Council independent verification from a Certified Farm Environment Planner that the use of land is compliant with either b)(i) or b)(ii) above; and~~
 - ~~d. Upon request from the Council, a description of the current land use activities shall be provided to the Council; and~~
 - ~~e. Where the property or enterprise contains any of the water bodies listed in Schedule G, new fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains).~~
- ~~4. Where the property or enterprise area is greater than 20 hectares:~~
- ~~a. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B; and~~
 - ~~b. The diffuse discharge of nitrogen from the property or enterprise does not exceed either:
 - ~~i. the Nitrogen Reference Point; or~~
 - ~~ii. 15kg nitrogen/hectare/year;~~whichever is the lesser, over the whole property or enterprise when assessed in accordance with Schedule B; and~~

- ~~c. No part of the property or enterprise over 15 degrees slope is cultivated or grazed; and~~
- ~~d. No winter forage crops are grazed in situ; and~~
- ~~e. Where the property or enterprise contains any of the water bodies listed in Schedule G:~~
 - ~~i. There shall be no cultivation within 5 metres of the bed of the water body; and~~
 - ~~ii. New fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains); and~~

5. ~~8.~~ For all properties greater than 4.1 hectares, from 31 March 2019, in addition to the requirements of Schedule A, the following information must be provided to the Waikato Regional Council by 1 September each year:
- a. Annual stock numbers; and
 - b. Annual fertiliser use; and
 - c. Annual brought in animal feed.

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

~~Scheme~~

~~Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2 the use of land for farming activities (excluding commercial~~

~~vegetable production) where the land use is registered to a Certified Industry Scheme, and the associated diffuse discharge~~

~~of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those~~

~~contaminants entering water is a permitted activity subject to the following conditions:~~

- ~~1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and~~
- ~~2. A Nitrogen Reference Point is produced 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~~
- ~~4. The Certified Industry Scheme meets the criteria set out in Schedule 2 and has been approved by the Chief Executive Officer of Waikato Regional Council; and~~
- ~~5. A Farm Environment Plan which has been prepared in accordance with Schedule 1 and has been approved by a Certified~~

~~Farm Environment Planner, is provided to the Waikato Regional Council as follows:~~

- ~~a. By 1 July 2020 for properties or enterprises within Priority 1 sub-catchments listed in Table 3.11-2, and properties or~~

~~enterprises with a Nitrogen Reference Point greater than the 75th percentile nitrogen leaching value;~~

~~b. By 1 July 2023 for properties or enterprises within Priority 2 sub-catchments listed in Table 3.11-2;~~

~~c. By 1 July 2026 for properties or enterprises within Priority 3 sub-catchments listed in Table 3.11-2; and~~

~~6. 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.~~

Rule 3.11.5.4 - Controlled Activity Rule – Farming activities with a Farm Environment Plan ~~not under a Certified Industry Scheme~~

~~Except as provided for in Rule 3.11.5.1A and Rule 3.11.5.2 the 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 is a permitted controlled activity until requiring resource consent application(s) to be lodged with the Waikato Regional Council by:~~

~~1. 1 January July 2020 for all properties or enterprises in Priority 1 sub-catchments listed in Table 3.11-2, and properties or enterprises with a Nitrogen Reference Point greater than the 75th percentile nitrogen leaching value; or~~

~~2. 1 July 2022 January 2023 for properties or enterprises in Priority 2 and 3 sub-catchments listed in Table 3.11-2.~~

~~3. 1 January 2026 for properties or enterprises in Priority 3 sub-catchments listed in Table 3.11-2;~~

Subject to the following conditions:

~~4. 3. The provision of information for the property or enterprise sufficient to satisfy property is registered with the Waikato Regional Council in conformance with Schedule A; and~~

~~5. 4. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B; and~~

~~5. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and~~

6. 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; and
7. The Identification of Vulnerable land and the appropriate mitigating actions has been completed and is included in the Farm Environment Plan.

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; and~~

Matters of Control

Waikato Regional Council reserves control over the following matters:

- i. The content of the Farm Environment Plan.
- ii. The actions and timeframes for undertaking mitigation actions that ~~maintain or~~ are necessary reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens relative to Table 3.11-1 ~~to water or to land where they may enter water.~~
- 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 a Decision Support Tool or the current version of OVERSEER®~~, does not increase above 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 having regard to Policy 4.
- vi. The monitoring, record keeping, reporting and information provision requirements for the consent holder ~~of the resource consent~~ to demonstrate and/or monitor 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.

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.

Rule 3.11.5.6 (A) - Restricted Discretionary Activity Rule – The use of land for Farming activities on a property or an enterprise

~~The use of land for Farming activities on a property or enterprise that does not comply with the conditions, standards or terms of Rules 3.11.5.1A to 3.11.5.5 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 restricted discretionary activity (requiring resource consent).

Subject to the following conditions:

1. The provision of information for the property or enterprise sufficient to satisfy 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
4. The provision of a Farm Environment Plan that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan; and
6. The provision of adaptive management methods to manage the Farming activities, including identified mitigating actions.

Waikato Regional Council restricts its discretion over the following matters:

- ~~i. Cumulative effects on water quality of the catchments and sub-catchments of the Waikato and Waipa Rivers.~~
- i. The diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens. The ability of the relevant sub-catchment to achieve the Freshwater Objectives. Targets and Limits in Table 3.11-1.
- ii. ~~The need for and the content of a Farm Environment Plan~~ The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a).
- iii. The term of the resource consent having regards to Policy 4

- iv. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.
- v. The time frame and circumstances under which the consent conditions may be reviewed.
- vi. ~~The matters addressed by Schedules A, B and C.~~

Notification:

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

Rule 3.11.5.6 (B) - Restricted Discretionary Activity Rule – The use of land for Farming activities managed at a sub-catchment scale.

The use of land for Farming activities in a sub-catchment that does not comply with the conditions, standards or terms of Rules 3.11.5.1A to 3.11.5.6A ~~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 restricted discretionary activity (requiring resource consent).

Subject to the following conditions:

1. The provision of information regarding the subject land within the sub-catchment sufficient to satisfy Schedule A; and
2. A Nitrogen Reference Point is produced for the sub-catchment in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The provision of a Farm Environment Plan(s) that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan(s); and
6. The provision of adaptive management methods to manage the Farming activities, including identified mitigating actions.

Waikato Regional Council restricts its discretion over the following matters:

- i. ~~Cumulative effects on water quality of the catchments and sub-catchments of the Waikato and Waipa Rivers.~~
- i. The diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens. The ability of the relevant sub-catchment to achieve the Freshwater Objectives. Targets and Limits as determined in Table 3.11-1.
- ii. ~~The need for and the content of a Farm Environment Plan~~ The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a).
- iii. The term of the resource consent having regards to Policy 4
- iv. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.
- v. The time frame and circumstances under which the consent conditions may be reviewed.

~~vi. The matters addressed by Schedules A, B and C.~~

Notification:

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

Rule 3.11.5.6 (C) - Restricted Discretionary Activity Rule – The use of land for Farming activities managed at a sector scheme scale.

The use of land for Farming activities managed by a sector scheme that does not comply with the conditions, standards or terms of Rules 3.11.5.1A to 3.11.5.6B 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 restricted discretionary activity (requiring resource consent).

Subject to the following conditions;

1. The provision of information by the properties or enterprises included in the sector scheme sufficient to satisfy Schedule A; and
2. A Nitrogen Reference Point is produced for the properties or enterprises included in the sector scheme in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The provision of a Farm Environment Plan(s) that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan(s); and
6. The provision of information regarding the sector scheme sufficient to satisfy Schedule 2.

Waikato Regional Council restricts its discretion over the following matters:

- ~~i. Cumulative effects on water quality of the catchments and sub-catchments of the Waikato and Waipa Rivers.~~
- i. The diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens. The ability of the relevant sub-catchment to achieve the Freshwater Objectives. Targets and Limits as determined in Table 3.11-1.
- ii. ~~The need for and the content of a Farm Environment Plan~~ The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a).
- iii. The term of the resource consent having regards to Policy 4
- iv. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.
- v. The time frame and circumstances under which the consent conditions may be reviewed.
- ~~vi. The matters addressed by Schedules A, B and C.~~

Notification:

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

Rule 3.11.5.7A - ~~Non-Complying Activity~~ Restricted Discretionary Activity Rule - Land use change.

~~Notwithstanding any other rule in this Plan,~~ Any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property, or enterprise or sub-catchment located in the Waikato and Waipa catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:

1. Woody vegetation to farming activities; or
2. Any livestock grazing other than dairy farming to dairy farming; or
3. Arable cropping to dairy farming; or
4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5.

A. Where the resultant land use can demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Limits (Total Nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1,

Is a restricted discretionary ~~non-complying~~ activity, (requiring resource consent) until 1 July 2026.

Subject to the following conditions:

1. The provision of information regarding the property, enterprise or sub-catchment is sufficient to satisfy Schedule A; and
2. A Nitrogen Reference Point is produced for the resultant land use for the property, enterprise or sub-catchment in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The provision of a Farm Environment Plan(s) that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan(s); and
6. The provision of adaptive management methods to manage the Farming activities, including identified mitigating actions; and
7. Identification of the current sub-catchment water quality in comparison to the Short-Term and 80-Year Fresh Water Objectives in Table 3.11-1;
8. Identification of the current sub-catchment Loads for Nitrogen and Phosphorous in Table 3.11-1; and

Waikato Regional Council restricts its discretion over the following matters:

- i. The ability of the relevant sub-catchment to achieve the Freshwater Objectives, Targets and Limits as determined in Table 3.11-1 within the dates prescribed.
- ii. The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a).

- iii. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.
- iv. The time frame and circumstances under which the consent conditions may be reviewed.
- v. ~~The matters addressed by Schedules A, B and C.~~

Notification

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

~~Rule 3.11.5.7B - Non-Complying Activity~~ Restricted Discretionary Activity Rule - Land use change.

~~Notwithstanding any other rule in this Plan,~~ Any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property, ~~or~~ enterprise or sub-catchment located in the Waikato and Waipa catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:

1. Woody vegetation to farming activities; ~~or~~
 2. Any livestock grazing other than dairy farming to dairy farming; ~~or~~
 3. Arable cropping to dairy farming; or
 4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5.
- A. Where the resultant land use cannot demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Loads (Total nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1, but otherwise satisfies Policy 16;

Is a restricted discretionary ~~non-complying~~ activity, (~~requiring resource consent~~)-until 1 July 2026.

Subject to the following conditions;

1. The provision of information regarding the property, enterprise or sub-catchment is sufficient to satisfy Schedule A; and
2. A Nitrogen Reference Point is produced for the resultant land use for the property, enterprise or sub-catchment in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The provision of a Farm Environment Plan(s) that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan(s); and
6. The provision of adaptive management methods to manage the Farming activities, including identified mitigating actions; and

Waikato Regional Council restricts its discretion over the following matters:

- i. The ability of the relevant sub-catchment to achieve the Freshwater Objectives, Targets and Limits as determined in Table 3.11-1.
- ii. The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a).
- iii. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.
- iv. The time frame and circumstances under which the consent conditions may be reviewed.
- v. ~~The matters addressed by Schedules A, B and C.~~

Notification

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

~~Rule 3.11.5.7C - Non-Complying Activity~~ Restricted Discretionary Activity Rule - Land use change.

~~Notwithstanding any other rule in this Plan,~~ Any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property, or enterprise or sub-catchment located in the Waikato and Waipa catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:

1. Woody vegetation to farming activities; or
2. Any livestock grazing other than dairy farming to dairy farming; or
3. Arable cropping to dairy farming; or
4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5.

- A. Where the resultant land use cannot demonstrate the ability of the sub-catchment to achieve the Freshwater Objectives, Targets and Loads (Total nitrogen and Total Phosphorous) as determined for the sub-catchment in Table 3.11-1, and Policy 16 does not apply;

Is a non-complying activity, (requiring resource consent)-until 1 July 2026.

If granted consent, the activity must comply with the following requirements, permissions, and conditions;

1. The provision of information regarding the property, enterprise or sub-catchment is sufficient to satisfy Schedule A; and
2. A Nitrogen Reference Point is produced for the resultant land use for the property, enterprise or sub-catchment in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The provision of a Farm Environment Plan(s) that has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner; and
5. The Identification of Vulnerable land, the appropriate use of it and any mitigating actions has been completed and is included in the Farm Environment Plan(s); and

6. The provision of adaptive management methods to manage the Farming activities, including identified mitigating actions.
7. Identification of the current sub-catchment water quality in comparison to the Short-Term and 80-Year Fresh Water Objectives in Table 3.11-1;
8. Identification of the current sub-catchment Loads for Nitrogen and Phosphorous in Table 3.11-1; and
9. The ability of the relevant sub-catchment to achieve the Freshwater Objectives. Targets and Limits as determined in Table 3.11-1; and
10. The appropriateness of the mitigating actions proposed in the Farm Environment Plan having regard to Policy 2(a); and
11. Monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent; and
12. The time frame and circumstances under which the consent conditions may be reviewed.

vi. ~~The matters addressed by Schedules A, B and C.~~

Notification

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

Rule 3.11.5.8 Discretionary Activity Rule- The use of land for Farming activities that does not comply with the conditions, standards or terms of Rules 3.11.5.1-3.11.5.6 is a Discretionary activity (requiring resource consent).

This activity is also subject to the requirements of other relevant rules in the Waikato Regional Plan.

Resource consent applicants must provide evidence in their application to demonstrate how the adverse effects of the proposed activity will be avoided, remedied or mitigated taking into consideration the relevant Objectives and Policies of this Plan.

Amended Schedules

Schedule B- Decision Support Tools ~~Nitrogen Reference Point~~

A property or enterprise or sub-catchment or subject land area managed under a sector scheme with a cumulative area greater than 20 hectares (or any property or enterprise used for commercial vegetable production) must have a Nitrogen Reference Point calculated, either in accordance with a Decision Support Tool that satisfies the criteria in Part A below, or in accordance with Overseer under Part B below.

Part A. Decision Support Tool

- a. Any Decision Support Tool shall be prepared by, or under the supervision of a suitably qualified person and meet the criteria in paragraph (b) below.
- b. Decision support tool criteria:
 - i. The model is based on sound science, including:
 - Scientific basis
 - Computational infrastructure
 - Assumptions and limitations
 - Peer review
 - ii. The model is managed to ensure quality, including
 - Quality assurance and quality control
 - Data availability and quality
 - Test cases
 - iii. The model's behaviour approximates to the real system being modelled (including the tools and procedures necessary to make this judgment), including:
 - Sensitivity and uncertainty analysis
 - Corroboration of model results with observations
 - Benchmarking against other models
 - iv. The model is appropriate for a specific regulatory application under Chapter 3.11, including:
 - Model resolution
 - Transparency
- c. The calculation report prepared in accordance with the decision support tool shall also include the information required under paragraphs (a.), (b.), (e.), (f.) and (g.) in Part B below.

Part B. Nitrogen Reference Point.

A property or enterprise with a cumulative area greater than 20 hectares (or any property or enterprise used for commercial vegetable production) must have a Nitrogen Reference Point calculated as follows:

- a. The Nitrogen Reference Point must be calculated by a Certified Farm Nutrient Advisor to determine the amount of nitrogen being leached from the property or enterprise during the relevant reference period specified in clause f), except for any land use change approved under Rule 3.11.5.7 where the Nitrogen Reference Point shall be determined through the Rule 3.11.5.7 consent process.
- b. The Nitrogen Reference Point shall be the highest annual nitrogen leaching loss that occurred during a single year (being 12 consecutive months) within the reference period specified in clause f), except for commercial vegetable production in which case the Nitrogen Reference Point shall be the average annual nitrogen leaching loss during the reference period.
- c. The Nitrogen Reference Point must be calculated using the current version of the OVERSEER® Model (or any other model approved by the Chief Executive of the Waikato Regional Council).
- d. The Nitrogen Reference Point data shall comprise the electronic output file from the OVERSEER® or other approved model, and where the OVERSEER® Model is used, it must be calculated using the OVERSEER® Best Practice Data Input Standards 2016, with the exceptions and inclusions set out in Schedule B Table 1.
- e. The Nitrogen Reference Point and the Nitrogen Reference Point data must be provided to Waikato Regional Council within the period 1 September 2018 to 31 March 2019.
- f. The reference period is the two financial years covering 2014/2015 and 2015/2016, except for commercial vegetable production in which case the reference period is 1 July 2006 to 30 June 2016.
- g. The following records (where relevant to the land use undertaken on the property or enterprise) must be retained and provided to Waikato Regional Council at its request:
 - i. Stock numbers as recorded in annual accounts together with stock sale and purchase invoices;
 - ii. Dairy production data;

- iii. Invoices for fertiliser applied to the land;
- iv. Invoices for feed supplements sold or purchased;
- v. Water use records for irrigation (to be averaged over 3 years or longer) in order to determine irrigation application rates;
- vi. Crops grown on the land; and
- vii. Horticulture crop diaries and NZGAP records.

Table 1: Data input methodology for ensuring consistency of Nitrogen Reference Point data using the OVERSEER® Model

Schedule C - Stock exclusion/Te Āpitianga C – Te aukatinga o ngā kararehe

Except as provided by Exclusions I. and II below., stock must be excluded from the water bodies listed in i. to iv. below as follows:

1. The water bodies must be fenced to exclude cattle, horses, deer and pigs, unless those animals are prevented from entering the bed of the water body by a stock proof natural barrier formed by topography or vegetation.
2. New fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within one metre of the bed of the water body (excluding constructed wetlands).
3. Livestock must not be permitted to enter onto or pass across the bed of the water body, except when using a livestock crossing structure.
4. For land use authorised under Rules 3.11.5.1A or 3.11.5.2, clauses 1 and 2 above must be complied with:
 - a. By 1 July 2020 for ~~properties and enterprises within Priority 1 sub-catchments listed in Table 3.11-2.~~
 - b. ~~By 1 July 2026 for properties and enterprises within Priority 2 and Priority 3 sub-catchments listed in Table 3.11-2.~~
5. For land use authorised under Rules 3.11.5.3, 3.11.5.4, 3.11.5.5, 3.11.5.6A, 3.11.5.6B or 3.11.5.6C clauses 1 and 2 must be complied with by the date and in the manner specified in the property's or enterprise's or sector schemes Farm Environment Plan(s), which shall be within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2025.

Water bodies from which cattle, horses, deer and pigs must be excluded:

- i. Any river that continually contains surface water.
- ii. Any drain that continually contains surface water.
- iii. Any wetland, including a constructed wetland.
- iv. Any lake.

Exclusions:

The following situations are excluded from clauses 1 and 2 above:

- I. Where the entry onto or passing across the bed of the water body is by horses that are being ridden or led.
- II. Where the entry onto or passing across the bed of the water body is by a feral animal.

~~Schedule 2 - Certification of Industry Sector Schemes/Te Āpitiwhanga 2 – Te whakamana i ngā tohu o ngā Kaupapa Ahumahi~~

~~The purpose of this schedule is to set out the criteria against which applications to approve an industry scheme will be~~

~~assessed.~~

~~The application shall be lodged with the Waikato Regional Council, and shall include information that demonstrates how~~

~~the following requirements are met. The Waikato Regional Council may request further information or clarification on~~

~~the application as it sees fit.~~

~~Approval will be at the discretion of the Chief Executive Officer of the Waikato Regional Council subject to the Chief~~

~~Executive Officer being satisfied that the scheme will effectively deliver on the assessment criteria.~~

~~Assessment Criteria~~

~~A. Certified Industry Scheme System~~

~~The application must demonstrate that the Certified Industry Scheme:~~

~~1. Is consistent with:~~

- ~~a. the achievement of the water quality targets referred to in Objective 3; and~~
- ~~b. the purposes of Policy 2 or 3; and~~
- ~~c. the requirements of Rules 3.11.5.3 and 3.11.5.5.~~

~~2. Has an appropriate ownership structure, governance arrangements and management.~~

~~3. Has documented systems, processes, and procedures to ensure:~~

~~a. Competent and consistent performance in Farm Environment Plan preparation and audit.~~

~~b. Effective internal monitoring of performance.~~

~~c. Robust data management.~~

~~d. Timely provision of suitable quality data to Waikato Regional Council.~~

~~e. Timely and appropriate reporting.~~

- ~~f. Corrective actions will be implemented and escalated where required, including escalation to Waikato Regional Council if internal escalation is not successful.~~
- ~~g. Internal quality control.~~
- ~~h. The responsibilities of all parties to the Certified Industry Scheme are clearly stated.~~
- ~~i. An accurate and up to date register of scheme membership is maintained.~~
- ~~j. Transparency and public accountability of Certified Industry Schemes~~
- ~~k. The articles of the scheme are available for public viewing.~~

~~B. People~~

~~The application must demonstrate that:~~

- ~~1. Those generating and auditing Farm Environment Plans are suitably qualified and experienced.~~
- ~~2. Auditing of Farm Environment plan requirements is independent of the Farm Environment Plan preparation and approval.~~

~~C. Farm Environment Plans~~

~~The application must demonstrate that Farm Environment Plans are prepared in conformance with Schedule 1.~~

A. Governance and management

Applications must include:

- 1. A description of the governance arrangements of the Scheme;
- 2. The contractual arrangements between the Scheme and its members;
- 3. A description of the process for gaining and ceasing membership;
- 4. A description of the Scheme area, including land uses, key environmental issues, property boundaries and ownership details of members' properties;
- 5. A procedure for keeping records of the matters in (4) above and advising WRC of changes;

B. Preparation of Farm Environment Plans

Applications must include:

- 1. A statement of the Scheme's capability and capacity for preparing and certifying Farm Environment Plans that meet the requirements of Schedule 1, including the qualifications and experience of any personnel employed by or otherwise contracted to the Scheme to prepare or certify Farm Environment Plans;
- 2. An outline of timeframes for developing Farm Environment Plans for its members.

C. Implementation of Farm Environment Plans

Applications must include:

1. A statement of the Scheme's capability and capacity for monitoring and assessing the implementation of Farm Environment Plans, including the qualifications and experience of any personnel employed by or otherwise contracted to the Scheme to monitor or assess implementation of Farm Environment Plans;
2. A description of the expectations and agreements around landowner and property record-keeping;
3. A strategy for identifying and managing poor performance in implementing Farm Environment Plans.

D. Audit

Applications must include a description of an annual audit process to be conducted by an independent body, including:

1. A process for assessing performance against agreed actions in Farm Environment Plans at an individual property level;
2. A statement of how audit results will be shared with the Scheme's members and the wider community;
3. A process for assessing the performance of any personnel employed by or otherwise contracted to the Scheme to prepare, certify, and audit the implementation of Farm Environment Plans.

A summary audit report must be submitted to the Waikato Regional Council at least annually.