BEFORE COMMISSIONERS APPOINTED BY THE WAIKATO REGIONAL COUNCIL

IN THE MATTER	of the Resource Management Act 1991				
AND					
IN THE MATTER	of the First Schedule to the Act				
AND					
IN THE MATTER	of Waikato Regional Plan Change 1- Waikato and Waipā River Catchments and Variation 1 to Plan Change 1				
AND					
IN THE MATTER	of submissions under clause 6 First Schedule				
ВҮ	BEEF + LAMB NEW ZEALAND LIMITED Submitter				

BRIEF OF EVIDENCE OF CORINA JODI JORDAN 5 July 2019

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TABLE OF CONTENTS

QUALIFICATIONS AND EXPERIENCE	1
EXECUTIVE SUMMARY	3
B+LNZ SUBMISSION	5
OUTLINE OF APPROACH UNDERPINNING FARMING PROVISIONS.	6
SUB CATCHMENT MANAGEMENT	6
TAILORED LAND AND ENVIRONMENT PLANS	12
APPENDIX 1: TRACK CHANGES PC1 HS3	17

QUALIFICATIONS AND EXPERIENCE

- 1. My full name is Corina Jodi Jordan.
- 2. I gave evidence for Beef + Lamb New Zealand Ltd (B+LNZ) as part of its case on the hearing stream 1 (HS1) and hearing stream 2 (HS2) topics. In my HS1 evidence, dated 15 February 2019, I set out my qualifications, current employment and employment history and professional affiliations. I confirm those details remain current.
- 3. My evidence for Hearing 1 summarised the planning approach proposed by Waikato Regional Council and also set out the background to the relevant regionally significant natural resource management issues, the statutory requirements and an evaluation of the relevant planning instruments.
- 4. My evidence for Hearing 2 focussed specifically on the management of land use to achieve freshwater ecosystem health outcomes with a focus on managing nitrogen, phosphorus, and pathogens, and the role of Farm Environment Plans as an efficient and effective method to assist in the achievement of PC1 objectives.
- My evidence for HS1 and HS2 remains pertinent to my evidence for Hearing
 I will not repeat this here.
- 6. This brief of evidence provides a planning assessment which specifically focuses on the matters in the Waikato Regional Council's proposed Plan Change 1 and Variation 1 (PC1) that relate to farming, and on which Beef + Lamb New Zealand submitted. It assesses the topics the Hearing Panel has directed be considered in hearing stream 3 and that have been addressed in the s42A report.
- 7. This evidence is organised as follows:
 - (a) Analysis of PC1 policies and methods with a focus on:
 - i. integrated environmental outcomes in relation to achieving the Vision and Strategy for the Waikato River;

- ii. sub catchment approach; and
- iii. tailored Land and Environment Planning;
- In preparing this evidence I have reviewed the plan change, supporting reports and statements of evidence of other experts relevant to my area of expertise, and relevant background documents and technical reports, including:
 - (a) Waikato Regional Councils proposed Plan Change 1 and Variation 1;
 - (b) Waikato Regional Councils s32 report;
 - (c) Waikato Regional Councils s42A report;
 - (d) Vision and Strategy for the Waikato River;
 - (e) Waikato Freshwater Strategy;
 - (f) B+LNZ submission on PC1 and Variation 1;
 - (g) Expert evidence of Mr Andrew Burtt HS1;
 - (h) Expert evidence of Dr Hannah Mueller HS1;
 - (i) Expert evidence of Dr Christopher Dada HS1;
 - (j) Expert evidence of Dr Tim Cox HS1 and HS2;
 - (k) Expert evidence of Dr Jane Chrystal HS1 and HS2;
 - (I) Expert evidence of Mr Richard Parkes HS1 and HS2;
 - (m) Expert evidence of Mr Gerry Kessels HS1.
 - (n) Expert evidence of Dr Alec MacKay HS2; and
 - (o) Expert evidence of Dr Alison Dewes HS2.

9. I reconfirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court's 2014 Practice Note and agree to comply with it. I confirm that the opinions I have expressed represent my true and complete professional opinions. The matters addressed by my evidence are within my field of professional expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

EXECUTIVE SUMMARY

- 10. For the policies and rules relating to farming to be effective, they need to cause an improvement in water quality in water bodies that are currently over-allocated. They also need to ensure that catchments that are close to exceeding water quality limits do not degrade to the point where the limits are exceeded. In my view, the provisions proposed by the Council do not achieve this.
- 11. In considering the evidence of B+LNZ, it is my view that there is a robust planning argument to support a plan regime that manages farming activities in a more holistic and integrated fashion in order to address freshwater ecosystem health, societal and cultural values, and to provide for community wellbeing especially in relation to their relationship with the Waikato River.
- 12. That approach is based around providing certainty to resource users through the provision of strong linkages between their activities and achievement of the objectives of the plan at the sub catchment freshwater management unit level, which is cognisant of broader spatial management requirements. These linkages are provided through methods including regulation, and policies which achieve the objectives of the Plan.
- As such I propose significant amendments to PC1 to provide for the following key areas:
 - (a) Stronger focus on sub catchment planning frameworks and incorporation of load limits and targets within Table 3.11-1;
 - (b) Tailored and risked based approach to farm environment planning underpinned by robust analyses of the underlying natural capital of the land through LUC analysis and identification of critical source areas;

- (c) Consenting pathway for sub catchment collectives.
- 14. Tailored integrated sub-catchment management provides an efficient and effective method to sustainably manage land and water resources in a way which provides for the economic, social, and cultural wellbeing of communities, and as such should be enabled and empowered through PC1.
- 15. Tailored FEPs, focussed on reflecting the natural character of the farm in its catchment context, along with the identification and management of critical source areas, provides an approach which is farm, and catchment-specific, adaptable and can be implemented and owned by farmers and communities.
- 16. It is more efficient and effective to seek that land uses internalise their externalities of concern, rather than treating all land uses the same. These externalities will not be the same for each land use and are dependent not only on the farming system, but also on the landscape that it occurs on. As such management frameworks should more correctly ensure that individuals avoid, remedy, or mitigate their effects on the environment, and that the appropriate management unit is both at the farm and the sub-catchment scale.
- 17. The approach I propose more appropriately and effectively gives effect to the Vison and Strategy in that it defines a clear trajectory of land use practice, and where required change, in order to protect and restore the health and wellbeing of the Waikato River, while providing for the health and wellbeing of its communities. Importantly the approach adopts an integrated and holistic framework for managing both terrestrial and freshwater resources that are intimately linked and spatially explicit.
- 18. The recommendations made through this planning evidence are designed to provide land use flexibility, and allow for innovation, adaptability and resilience in the primary sector, while giving effect to the Vision and Strategy, NPS-FM and RPS, along with meeting the purpose of the Act.

B+LNZ SUBMISSION

- 19. I summarised B+LNZ submission on PC1 in my evidence for Hearing 1.¹ That summary remains relevant to this hearing. The chief areas of concern related to PC1 which were set out in B+LNZ's original submission and which are the subject of this hearing stream are summarised in (a) to (f) below:
 - (a) The lack of clarity for individuals and communities on how the 80-year water quality outcomes will be achieved;
 - (b) The content and structure of farm environment plans (FEP); and
 - (c) The blanket application of the regulatory instruments. B+LNZ considers this approach fails to recognise local conditions and communities. B+LNZ seek a tailored sub catchment approach, which B+LNZ consider is more efficient and effective approach than the PC1 approach as notified.
- 20. My understanding of B+LNZ's submission is that the organisation supports giving effect to the Vision and Strategy through PC1, and the establishment of actions to manage water quality, and in particular the identification of environmental risk tied with appropriate actions to avoid, remedy, or mitigate this risk. B+LNZ, however, has expressed concerns that the provisions, including rules and activity standards, are overly prescriptive and may not be sufficiently linked to an effect on water quality or ecosystem health and processes.
- 21. In this evidence, my focus will be on the structure and cohesion of the policies and rules in relation to FEPs, and the sub catchment approach, and the overall effectiveness and efficiency of the planning framework.

¹ Corina Jordan, Evidence in Chief Hearing 1, paragraphs 32-35.

OUTLINE OF APPROACH UNDERPINNING FARMING PROVISIONS

- 22. My HS1 evidence and that of the other B+LNZ witnesses sets out the overall water management framework within which the farming provisions have been evaluated and developed. I will not repeat that evidence here, other than to briefly summarise that approach.
 - (a) The values and freshwater objectives are defined.
 - (b) Limits or targets are set that provide for those objectives to be met. Limits are set at a level that ensures that the life-supporting capacity and the availability of resource for future generations are protected as a bottom line.
 - (c) Methods including rules are developed which, when implemented, work together to ensure that all resource use affecting the achievement of the Freshwater Objectives is managed so that where limits are currently met the limits are not breached, and where the targets are currently breached there is a progressive improvement over time to a point where the targets are no longer exceeded.
- 23. The framework for the farming provisions I have proposed builds on the broader framework set out above.

SUB CATCHMENT MANAGEMENT

- 24. B+LNZ's submission seeks to ensure PC1 is effects based, efficient and effective, and as such provides a tailored and risk based approach to managing the cumulative impacts of primary production along with point source discharges. The key methods that B+LNZ propose include greater recognition of sub catchment management and empowering and supporting catchment collectives through the regulatory and non regulatory methods of PC1, along with tailored Land/ Farm Environment Plans. Along with improving the linkages between land uses and management to the Objectives of PC1 including Freshwater Objectives.
- 25. The changes sought by B+LNZ are reflected in relief sought to a number of provisions, as follows:

Provision	Relief Sought by B+LNZ						
Table 3.11-1	Inclusion of load limits at the FMU and sub-catchment scale to support tailored sub catchment management and community collective methods.						
Policy 9 and Policy 17	Retain Policy 9 but expand to facilitate and support the establishment and operation of sub-catchment groups to manage water quality and biodiversity issues facing a sub- catchment, providing innovative and where required edge of field mitigation and which facilitates flexible, viable businesses and communities, and enables transfer of resources such as nutrients within the assimilative capacity of soils and water, and at sustainable levels.						
	Gives effect to new collaborative catchment objective(s).						
	Incorporates Policy 17 provisions in relation to recognition, support, and enhancement of biodiversity values.						
	Include a new Method which provides for catchment groups and approaches to addressing complex land and water management issues.						
Rule 3.11.5.6	Amend Rule 3.11.5.6 to enable and facilitate sub catchment collective groups and enterprises in sustainably managing land and water resources to achieve the water quality attributes and targets in table 3.11-1 by 2096. B+LNZ submission seeks inclusion point source discharges through linking to policies 12 and 13, which can be provided for through Rule 3.11.5.6.						
	The submission sets out the matters that the Waikato Regional Council restricts its discretion over. These include but are limited to:						
	 Cumulative effects on water quality in the relevant sub-catchment(s); 						
	ii. The diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens;						
	iii. The need for and content of a farm environment plan;						
	iv. Term of consent;						
	v. Compliance with any Sub-catchment management plan prepared for the relevant sub-catchment;						
	vi. The adoption of an adaptive management and mitigation planning approach to manage diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens;						
	vii. Edge of field mitigation, remediation, and biodiversity enhancement (in accordance with Policy17);						
	viii. The matters set out under Policy 12 and 13.						
New Discretionary Rule	For those activities which do not meet the standards or conditions of the Permitted, Controlled, or Restricted Discretionary Rules.						
	With the exception of land use change which does not meet the permitted activity standards, or activities which may						

		nitrogen	standards.	These	default	to	non
complying							

- 26. I support these amendments in principle because they seek to provide for a tailored sub catchment approach to sustainable land and freshwater management and incorporate a more holistic and integrated approach to managing natural resources, and provision of community and cultural values, than the approach proposed in PC1.
- 27. From a planning perspective, management frameworks should be effects based, efficient and effective in achieving the objectives of PC1 and other relevant statutory documents, such as the Vison and Strategy and the NPSFM. The framework may comprise both regulatory and non regulatory methods, with the level of regulatory oversight commensurate with the level of environmental risk.
- 28. I have provided planning evidence in relation to tailored sub catchment management in my EiC for HS1 (paragraphs 29, 119, 120, 121,122, 123, 124, 125, 126, 138, 139, 140, 141, 142, 178, 179, and 180) and HS2 (paragraphs 13, 14, 16, 22, 40, 41, 50, 54, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, and 83). As set out in my EiC for HS1 and HS2, I consider that tailored integrated sub-catchment management provides an efficient and effective method to sustainably manage land and water resources in a way which provides for the economic, social, and cultural wellbeing of communities, and as such should be enabled and empowered through PC1.
- 29. Integrated management is a requirement of councils under s30 of the Act, the NPS-FW, and Vision and Strategy. The Vision and Strategy includes objectives which specifically recognise and provide for an integrated, holistic and coordinated approach to management of the natural, physical, cultural and historic resources of the Waikato River², along with 4 specific and targeted strategies. These strategies focus on enhancing community participation, including knowledge sharing, and responsibility, in working

² Vision and Strategy, objective e, page 6.

together to achieve holistic and integrated outcomes in relation to enhancing and restoring the health of the Waikato River.

- 30. Integrated management of natural and physical resources, which is holistic, collaborative and catchment based, is a requirement under the Waikato Regional Policy Statement (RPS) (for example s3.1, and in particular Objectives 3.1 and 3.2, and policies 4.1, 4.4, 8, 8.1(a), and 11.3). The RPS requires the restoration and protection of the ecosystem health and biodiversity values of the Waikato River through a range of policy requirements, including the requirement to implement the Vision and Strategy (s3.4.) and maintaining or enhancing indigenous biodiversity (policy 11.1).
- 31. The RPS also identifies and prioritises the protection of ecosystem services (Objective 3.8), ecological integrity and indigenous biodiversity (Objective 3.19), and the versatility and resilience of soils (Objective 3.25 and 3.26), thus providing a robust framework which requires an integrated and holistic approach to managing natural resources along with community wellbeing, and economic wellbeing. As such PC1 is required to give effect to these provisions in achieving the Vision and Strategy for the Waikato River.
- 32. The statutory context at the regional level also directs that the spatial unit at which freshwater is managed needs to be that which allows for the most effective management of that freshwater. For example, the integrated catchment management directives in the Waikato RPS acknowledges the need to provide for "variability in catchment management response" (Policy 8.1(a)), and to adopt a 'catchment-based' approach (Method 8.1.1). The explanatory text accompanying Policy 8.1 states:

The management of fresh water bodies is most effectively undertaken at a catchment or sub-catchment level. This approach recognises the interconnected nature of ground and surface water and land use, and is considered a more effective approach of managing the cumulative effects of activities and discharges on fresh water body values.³

³ Waikato RPS, page 8-3.

- 33. I believe that adoption of a sub-catchment approach, as supported in the evidence of Mr Parkes and Dr Whatley, would provide an efficient and effective method within PC1 to achieve the health and restoration of the Waikato River and the wellbeing of communities and their relationship with the River. An integrated sub catchment approach would empower communities to understand local and broader spatial scale issues in relation to environmental health, with a focus on aquatic ecosystem health, and the relation of terrestrial environments and use of these resources on the health and wellbeing of the river. Solutions would be found that are spatially explicit and more efficient and effective at achieving freshwater objectives, at a broad range of scales rather than the current one size fits all approach proposed in PC1.
- 34. I therefore propose the following amendments in addition to those proposed through HS1 and HS2, as set out in Appendix 1:
 - Table 3.11-1 inclusion of load limits at the sub catchment and broader FMU scale;
 - Policy 9 is amended to provide the policy direction for regulatory methods which enable and empower a sub catchment collective approach to the management of land and freshwater resources;
 - c) Policy 17 is elevated in the policy hierarchy and elaborated to include full consideration of the Vison and Strategy for the Waikato River, which includes acknowledgement of the interconnected nature of land and freshwater resources and provision for the protection of ecosystems, and the health and wellbeing of communities and their relationship to natural resources including the Waikato River;
 - New RD Rule to specifically provide for sub catchment community approaches to the sustainable management of land and water resources.
- 35. In relation to Policy 17. As set out in my EiC for HS1 (paragraph 90), recognition that provision for the restoration and protection of the Waikato River is broader than just water quality and encompasses ecosystem processes and the health and wellbeing of communities, is reflected within

the strategies of the Vision and Strategy, in particular those that recognise and provide for integrated and holistic management of the health of the Waikato river. These strategies include strategies 9 which encourages a "whole of river' approach to the restoration and protection of the Waikato River", and 8 and 10 which recognise the importance of community understanding, ownership, and participation in working together to restore and protect the health of the Waikato River.

- 36. As such PC1 should be amended to include stronger recognition of the integrated relationship between land and freshwater including recognition of biodiversity values within the landscape, the physical form and structure of freshwater resources, and communities. Policy 17 therefore should be elevated in relation to the hierarchy of policy provisions and form a foundation to the cascade of methods which give effect to the policy [ies] which in turn achieve the Plans Objectives and Freshwater Objectives.
- 37. I have reviewed the expert planning evidence on behalf of Wairakei Pastoral and generally support the provisions proposed in relation to supporting a sub catchment collective approach to land and water management.
- 38. In my opinion the approach that I have set out above is consistent with giving effect to the RMA and the NPSFM effectively and efficiently. The approach more appropriately and effectively gives effect to the Vison and Strategy in that it defines a clear trajectory of land use practice, and where required change, in order to protect and restore the health and wellbeing of the Waikato River, while providing for the health and wellbeing of its communities. Importantly the approach adopts an integrated and holistic framework for managing both land and water resources that are intimately linked and spatially explicit.
- 39. In my opinion it is important that PC1 is amended to recognise that the provision for the intrinsic values of freshwater, including ecosystem health and processes, and provision for the use values of freshwater including for economic, social, and cultural wellbeing and future generations, should not be in competition with, or in opposition to, each other. The outcomes being sought by PC1 should consider carefully the provision of both limbs of sustainable management and provide for those opportunities within clearly

and carefully defined provisions to identify and achieve freshwater objectives.

40. It is more efficient and effective to seek that land uses internalise their externalities of concern, rather than treating all land uses the same. These externalities will not be the same for each land use and are dependent not only on the farming system, but also on the landscape that it occurs on. As such management frameworks should more correctly ensure that individuals avoid, remedy, or mitigate their effects on the environment, and that the appropriate management unit is both at the farm and the sub-catchment scale.

TAILORED LAND AND ENVIRONMENT PLANS

- 41. I have provided planning evidence in relation to tailored Farm or Land Environment Plans through HS1 (paragraphs 29, 30) and HS2 (paragraphs 54, 174 to 184). In my view Land or Farm Environment Plans are a key component of PC1, and provide an efficient and effective method which is tailored to the property and sensitive to farm and catchments natural capital and unique opportunities and environmental vulnerabilities. As set out in my HS1 evidence my view is that tailored FEPs, focussed on reflecting the natural character of the farm in its catchment context, along with the identification and management of critical source areas, provides an approach which is farm and catchment specific, adaptable and can be implemented and owned by farmers and communities.⁴
- 42. I have carefully considered the further technical evidence presented by B+LNZ experts, and those of other submitters as part of HS2, along with the section 42A officers report. My position on FEPs/ LEPs remains as set out in my planning recommendations for HS2.

⁴ Clean Water Consultation Document (2017) Table 1, page 29.

⁴ Mr Beetham, Evidence in Chief Hearing 1, paragraph 22.

- 43. Requirements for (as yet undefined) minimum standards for Good Farming Practice, are contrary to the principles of tailored farm specific planning, which as I understand it, derive their effectiveness from a basis of:
 - i. understanding and documenting the farms natural resources;
 - ii. considering the vulnerability and opportunities that these resources provide;
 - iii. identifying critical source areas; and
 - iv. then putting in place time bound actions that avoid, remedy, or mitigate the impacts of farming on the environment.
- 44. The section 42A officers report provides no further clarification on what they consider to be "good farming practices", and as such the incorporation to this phrase provides no added benefit in relation to plan workability, or clarity, or even intent. As such it is superfluous to plan requirements.
- 45. As set out in the evidence of Mr Parkes (EiC HS3 para 15) "Land Environment or Farm Environment Plans offer a tailored approach to understanding and categorising a farm's natural capital assets (geology, topography, soils, climate, biodiversity, and water resources), and identifying and managing environmental risks. Such plans are also critical in ensuring that decisions are prioritised in line with business, family, social and cultural goals. In my experience, if developed by the farmer and when sitting within a catchment context, these plans can result in "issue and solution" ownership and ultimately optimal use of natural resources on that property to deliver cumulative environmental benefits".
- 46. Correctly tailored use of farm planning tools is critical in balancing the implementation of mitigations within farm system objectives to improve whole system sustainability. The identification of environmental risks and agreed actions is undertaken in a whole farm systems approach to managing the effect of the operation on the environment and optimal resource use, by matching appropriate land use to different areas of the farm while achieving production and development goals for the property.

- 47. As such Farm Environment Plans, and the process of engaging farmers in their development, empower greater understanding of the farms natural character in the context of its wider landscape, and provide a risk matrix for activities including land uses, that enable farmers to make informed decisions about the use of their land and their management practices over the long-term.
- 48. Application of FEP's through methods which facilitate an individualised farm scale risk assessment, taking into account the sub catchment Freshwater Objectives, limits and targets, is therefore an efficient and effective approach to empowering farmers to sustainably manage their natural resources in an integrated and targeted manner.
- 49. The officers also recommend the inclusion of "nutrient use efficiency". My understanding is that "nutrient use efficiency" can in fact reduce the gains achievable by farmers in relation to nutrient losses, rather than maximise reductions required. This can be as a result of increasing stocking rates, or supplementary feeding, which can increase per animal efficiency, but override reductions in leaching achievable without consideration of "nutrient use efficiency", while still farming to the properties NRP or 75th percentile. As with the incorporation of "good farming practices", "nutrient use efficiency" fails to improve plan workability and clarity in relation to what is required of plan uses, and instead provides another layer of complexity. Inclusion of "minimise nutrient losses to water" while useful in relation to setting the outcome sought by specific actions through the FEP, does not in itself address the issue that "maximising nutrient use efficiency". It is recommended that "minimise nutrient losses to water" be retained, but "maximise nutrient use efficiency" be rejected.
- 50. As set out in my HS2 evidence, I recommend the following amendments to PC1:
 - a) Delete reference to Good Farming Practice;
 - b) Require LUC analysis which informs landscape vulnerabilities and informs management responses including stocking management policies. Provide for farm scale mapping (1:10,000);

- c) Definition for LUC;
- Incorporation of Nitrogen Risk Scorecard Assessment for medium intensity land uses;
- e) Link FEP actions to sub catchment Freshwater Objectives, Limits, and/ or Targets;
- f) Where reductions in discharge[s] of contaminant[s] is required, that this is proportionate to the water quality improvements required in the sub- catchment as set out in Table 3.11-1 and proportionate to the discharge level of the activity;
- g) Application of NRP to high risk activities only and require a sinking lid approach to reducing nitrogen discharges to the specified standard by 2026;
- h) Definition for Critical Source Area;
- i) Amendments set out under Schedule C
- 51. In relation to the officers section 42A report, I support the following amendments:
 - a) 3b Management Area: Nutrient Management Principals (4),(5),(6),(7) and (8);
 - b) 3c Management Area: Waterways Principals (10) and (11);
 - c) 3d Management Area: Land and soil Principals (14) (16), and (17);
 - d) 3e Management Area: Effluent Principals (18), (19), (20), and (21).
 However as set out in the EiC of Dr Dewes further quantifiable standards around effluent ponds, and permeability should be included;
 - e) 3f Management Area: Water and Irrigation Principal (22). However quantifiable minimum practice standards for irrigation should be included such as requirement for deficit irrigation.

- 52. The benefits of a sub-catchment approach and tailored Land or Farm Environment Plans have been discussed in this evidence. These benefits apply to farm specific environmental mitigation based on the sub-catchment or receiving water body water quality and identified issues, if any. This approach ensures that the level of regulation and methods required to achieve improved management practice is commensurate with the level of risk and effects on water quality and the values.
- 53. Tailored FEPs, focussed on reflecting the natural character of the farm in its catchment context, along with the identification and management of critical source areas, provides an approach which is farm, and catchment-specific, adaptable and can be implemented and owned by farmers and communities.
- 54. It is more efficient and effective to seek that land uses internalise their externalities of concern, rather than treating all land uses the same. These externalities will not be the same for each land use and are dependent not only on the farming system, but also on the landscape that it occurs on. As such management frameworks should more correctly ensure that individuals avoid, remedy, or mitigate their effects on the environment, and that the appropriate management unit is both at the farm and the sub-catchment scale.

DATED 5 July 2019

Ms Corina Jodi Jordan

APPENDIX 1: TRACK CHANGES PC1 HS3

Track changes recommended at shown either struck through where proposed to be deleted or <u>underlined</u> where new provisions are proposed.

Policy 9: Sub-catchment (including edge of field) mitigation planning, co-ordination and funding/Te Kaupapa Here 9: Te whakarite mahi whakangāwari, mahi ngātahi me te pūtea mō te riu kōawāwa (tae atu ki ngā taitapa)

<u>The Council will</u> Ttake a prioritised and integrated approach to sub-catchment <u>land and</u> freshwater water quality management by <u>supporting the establishment and operation of Sub</u> <u>Catchment Collectives and</u> undertaking sub-catchment planning <u>to-</u> and use this planning to support actions including edge of field mitigation measures. Support measures that efficiently and effectively contribute to the integrated management of land and freshwater resources, and provide for healthy ecosystems water quality improvements. This approach includes:

- Engaging early with tangata whenua and with landowners, communities and potential funding partners in sub- catchments in line with the priority areas listed in Table 3.11-2; and
- b. Assessing the reasons for current water quality and sources of contaminant discharge, at various scales in a sub- catchment; and
- b1. <u>Support the establishment and operation of sub catchment collective initiatives</u> through both non regulatory and regulatory methods;
- c. Encouraging cost-effective mitigations where they have the biggest effect on improving water quality; and
- d. Allowing, where multiple farming enterprises contribute to a mitigation, for the resultant reduction in diffuse discharges to be apportioned to each enterprise in accordance with their respective contribution to the mitigation and their respective responsibility for the ongoing management of the <u>mitigation</u>.
- e) ensure any relevant information or expertise for making sustainable land management decisions is available to land managers;
- <u>f</u>) support local investigation and water monitoring programmes where information gaps exist;

- g) support development and use of catchment scale models that assist in identification of Land Use Capability Classes and identification and management of critical source areas;
- <u>h)</u> support catchment and farm scale decision making to meet Plan and freshwater
 <u>objectives and encourage local solutions and innovative and flexible responses to</u>
 <u>water quality issues;</u>
- work with and support the establishment of catchment collectives that address both terrestrial and freshwater ecosystem health objectives and stream flow management through environmental management programmes as specified in Schedule X and within the timeframes specified in Schedule X.

Policy 17: Considering the wider context of the Vision and Strategy/Te Kaupapa Here 17: Te whakaaro ake ki te horopaki whānui o Te Ture Whaimana

When applying policies and methods in Chapter 3.11, seek opportunities to advance those matters in the Vision and Strategy and the values^ for the Waikato and Waipa Rivers that fall outside the scope of Chapter 3.11, but could be considered secondary benefits of methods carried out under this Chapter, including, but not limited to:

- a. Enhance biodiversity, wetland values and the functioning of terrestrial and freshwater ecosystems; and
- b. Enhance access and recreational values associated with the rivers;
- c. River geomorphology and processes;
- d. Ecological corridors, and riparian margins;
- e. Additional water quality parameters (DO, temperature, conductivity, deposited sediment);
- <u>f.</u> Biodiversity indicators such as the Macroinvertebrate Community Index (MCI) and measurements of biota (e.g. fish, birds); and
- g. Mātauranga Māori indicators such as the cultural health index (CHI); and
- h. The relationship of Iwi, Hapu, and communities with their freshwater resources, and their health and wellbeing.

<u>New Rule 3.11.5.6 (X) - Restricted Discretionary Activity Rule – The use of land for</u> <u>Farming activities managed at a sub-catchment scale.</u>

The use of land for Farming activities in a sub-catchment that does not comply with the conditions, standards or terms of Rules 3.11.5.2 to 3.11.5 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. <u>The provision of information regarding the subject land within the sub-catchment</u> sufficient to satisfy Schedule X; and
- 2. <u>Cattle, horses, deer and pigs are excluded from water bodies in conformance with</u> <u>Schedule C; and</u>
- 3. <u>The provision of a Farm Environment Plan(s) that has been prepared in</u> <u>conformance with Schedule 1 and has been approved by a Certified Farm</u> <u>Environment Planner; and</u>
- 4. <u>The provision of adaptive management methods to manage the Farming</u> activities, including identified mitigating actions.

Waikato Regional Council restricts its discretion over the following matters:

- 1. <u>Achievement of Freshwater Objectives as set out in Table 3.11-1 including</u> <u>timeframes for these to be achieved:</u>
- 2. Cumulative effects on water quality of the catchments and sub-catchments of the Waikato and Waipa Rivers;
- 3. <u>The diffuse discharge of nitrogen, phosphorus, sediment and microbial</u> <u>pathogens;</u>
- 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 1 and Policy 2;
- 5. <u>The matters addressed by Schedules X, 1 and C;</u>

- 6. Allocation of nitrogen leaching discharge allowances in accordance with Policy 7;
- 7. <u>Compliance with any Sub-catchment management plan prepared for the relevant</u> <u>sub-catchment;</u>
- The adoption of an adaptive management and mitigation planning approach to manage diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens;
- Edge of field mitigation, remediation, and biodiversity enhancement in accordance with Policy17;
- 10. The matters set out under Policy 12 and 13;
- 11. The term of the resource consent having regards to Policy 4;
- 12. <u>The monitoring, record keeping, reporting and information provision requirements</u> for the holder of the resource consent; and
- 13. <u>The time frame and circumstances under which the consent conditions may be</u> <u>reviewed.</u>

Notification:

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

Schedule X; Sub Catchment Collective

Plan Change 1 provides for an Sub Catchment Collective to work collectively on behalf of their members to meet Objectives of PC1 including Freshwater Objectives.

This schedule sets out the requirements for the establishment of a Sub Catchment Collective and their operation in order for them to be approved by the Waikato Regional Council. The Sub Catchment Collective must meet the requirements set out in Section A and B below.

Section A: Sub Catchment Collective Programme

Each Sub Catchment Collective must prepare a Sub Catchment Collective Programme that meets the requirements set out below and under Section A. This programme must identify the key Land and Freshwater management issues identified in this Plan that are relevant to;

- a) the sub catchment;
- b) the nature of the land and water use activities carried out within that catchment;
- c) the scale of the effects on water quality or water quantity from the activities in that catchment land and water use;

The Programme will describe an environmental management strategy relevant to the freshwater objectives where the member properties are located.

A summary of the Programme objectives and outputs will be publicly available through the Council website.

Any Sub Catchment Programme prepared in accordance with Schedule X may include or contribute to other initiatives or objectives (such as in relation to farm production, pest control, biodiversity or other land management issue) as desired by the Catchment Collective. These aspects enable integrated land and water management for a wider range of management objectives.

SECTION A: Sub Catchment Collectives Programme Requirements

As a minimum a Sub Catchment Collective shall meet the following requirements:

- 1. Minimum requirements for establishment;
 - A sub catchment collective must incorporate more than 25% of the land area in the target sub catchment.
- 2. Governance and Management

Each sub Catchment Collective must undertake to carry out the requirements of Section B and must specify the manner it will carry this out. This must address the following:

- a) Details relating to the governance and management arrangements of the Program including:
 - How decisions are to be made and how the requirements of Section B will be carried out including obligations by members to carry out the property specific requirements;
 - ii. <u>Conditions of membership of the Programme by individual land managers</u> (the 'Members' who commit to the Program), including the circumstances and terms of membership, sanctions or removal from the Collective or Industry Program including in relation to unreasonable non-performance of actions identified in clauses 3-6 below;
 - iii. <u>The process for assessing performance at an individual property level</u> <u>compared to agreed actions at the catchment scale.</u>

Note 1: the Sub Catchment Collective may prepare its own terms of reference as well as manage their own decision making processes and administration. This may include appointing a spokesperson or secretary to ensure recording and reporting work is completed as necessary.

- b) Information and management systems and processes to ensure;
 - i. <u>Competent and consistent performance in meeting the requirements of this</u> <u>schedule;</u>
 - ii. Robust data management, including up-to-date registers of Programme Members.
 - iii. <u>Timely provision of suitable quality data and information required under the</u> <u>following clauses to Waikato Regional Council;</u>

- iv. <u>Conditions of membership of the Programme by individual land managers</u> (the 'Members') who commit to the Programme
- 3. <u>A description of the Program area including:</u>
 - a. locations and maps;
 - b. land uses;
 - c. key environmental issues and risks, including;
 - i. <u>Identifying Land Use Capability Classes and Critical Source areas</u> including those are risk of erosion and sediment loss;
 - ii. <u>the location of drains, streams, rivers, wetlands and other water</u> <u>bodies;</u>
 - iii. <u>The location of any Registered Drinking Water Supply that any</u> properties in the program area are located in, plus the contact <u>details of the water supply manager;</u>
 - iv. activities at particular risk of nutrient loss;
 - v. property boundaries and details about ownership and property managers;
 - vi. <u>contact details of individual land managers and landowners within the</u> <u>Program (the 'Members').</u>

Section B: This section sets out the requirements for the environment plan for each Sub Catchment Collective

- 1. Environmental Outcomes:
 - a) <u>With reference to Freshwater Objectives in Table 3.11-1 specified in this</u> <u>Plan relevant to the location of Members' properties and activities being</u>

undertaken, a statement of the measures or practices needed in relation to minimising and mitigating the cumulative environmental effects of land use that will enable the specified water quality objectives to be met including where appropriate for;

- i. <u>managing contaminant losses to waterways including efficient</u> <u>use of nutrients and, where water quality is degraded,</u> <u>reductions in losses that contribute to meeting the specified</u> <u>Freshwater Objectives in Table 3.11-1;</u>
- ii. <u>managing riparian margins, maintaining or improving the</u> <u>physical and biological condition of soils in order to avoid,</u> <u>remedy or mitigate problems arising from:</u>
 - a. Loss of topsoil by wind or water erosion;
 - b. Movement of soils and contaminants into waterways;
 - c. Damage to soil structure and health;
 - d. Mass movements of soil
- iii. wetland management;
- iv. <u>Management of animal effluent to avoid contamination of</u> <u>ground and surface waters:</u>
- v. <u>Measures required to reduce risk of contamination of the source</u> water for any Registered Drinking Water Supply:
- vi. <u>Management of stock, including in relation to river or stream</u> crossings and exclusion from waterways in a manner that is consistent with Schedule C;

- vii. <u>an assessment of the state of riparian margins in the</u> programme area, and the identification of opportunities to provide shading of the adjacent waterway or improvements to <u>riparian margin values;</u>
- viii. <u>Timeframes for when each of the actions or mitigations at a</u> property or catchment scale are to be implemented and which are consistent with meeting the timeframes specified for relevant Freshwater Objectives and targets in Table 3.11-1;
- 2. Information Requirements;
 - a) <u>The Sub Catchment Collective must prepare a statement of the data and information that will be collected in order to develop the Sub Catchment Collective Program, monitor implementation and report to Council. This will include details about the format and timing of data or information collection and delivery by the member properties and by the Catchment <u>Collective or Industry Program including:</u></u>
 - i. <u>Any information or assessments about the nature and</u> <u>significance of nitrogen discharges from member land uses;</u>
 - ii. <u>Any requirements for record keeping by property managers</u> including information about changes to land ownership;
 - iii. <u>any environmental monitoring to be carried out by the Sub</u> <u>Catchment Collective;</u>
 - iv. A statement of the information and data to be provided for the member properties which will be used to develop the Sub Catchment Collective and which includes where appropriate;

- a. an assessment of the contaminant loss risks (particularly for nutrients, sediment and E.coli) associated with the major farming activities on the member properties or in relation to critical contaminant source areas (including risks associated with direct runoff into waterways and indirect contaminant losses);
- b. <u>how the identified contaminant loss risks and soil</u> management will be managed by the property manager, including in relation to standards for nitrogen <u>discharges;</u>
- c. LUC (Land Use Capability);
- d. Olsen P;
- e. <u>Stocking rates and densities of different classes of</u> stock;
- f. Application of fertilisers;
- g. Application of collected animal effluent;
- h. <u>Cultivation, soil disturbance or vegetation clearance</u> <u>activities</u>
- 3. Nutrient Management:
 - an inventory of the nitrogen loss rate (kg/ha/year) for properties likely to exceed the nitrogen loss rates set out under Table X as determined by application of Overseer (or an alternative nutrient budget model approved by the Waikato Regional Council) by a suitably qualified independent practitioner;

- b) <u>a description of any mitigation measures identified as necessary to meet</u> the Nitrogen instream Freshwater Objectives on those properties or within the relevant catchment;
- c) <u>annual recording and reporting of nutrient input and export data,</u> <u>including annual nitrogen loss rates.</u>
- 4. Approval:
 - a) <u>The Sub Catchment Collective plan will be submitted for approval by the</u> Waikato Regional Council by the end of the relevant year specified for that catchment. In making decisions to approve the Programme the <u>Council will take into account;</u>
 - i. whether the requirements of this Schedule are met;
 - whether the programme is consistent with the policies, Plan and Freshwater Objectives and Targets that are relevant for that <u>Sub Catchment:</u>
 - whether the Program was appropriately informed by person(s)
 with the necessary professional qualifications to make
 assessments about the contaminant loss risk and mitigation
 measures;
 - iv. whether the governance and management systems are in place to enable the implementation of the program.
- 5. Reporting;
 - a) <u>A summary report on the implementation of the Programme shall be</u> <u>submitted every year to the Waikato Regional Council that describes:</u>
 - i. The programme area and location and membership;

- ii. <u>Relevant freshwater objectives including where improvements</u> <u>are required in degraded water bodies;</u>
- iii. Any amendments to the programmed mitigation measures plus any changes made to them and reasons for them (including any adverse events such as severe weather, earthquakes);
- iv. The amount, location or nature of mitigation measures implemented;
- v. Data collected in relation to nutrient loss in clause (3)

6. Program Review;

- a) Each Sub Catchment Collective will review its Program no less than every 5 years and report to the Waikato Regional Council on the findings of the review including:
 - i. progress towards meeting Freshwater Objectives:
 - ii. <u>Rate of implementation of identified works to reduce</u> <u>contaminant losses, including sediment and nutrients;</u>
 - iii. adoption of any new mitigation including edge of field mitigation measures;
 - identification of opportunities for improvements to the programme including where necessary amending performance standards, and in relation to nutrient management in clause 3;
 - v. any issues arising with meeting objectives or milestone
- 7. Auditing:

a) The Waikato Regional Council will;

- i. <u>Publicly report on the implementation of Sub Catchment</u> <u>Collective Program;</u>
- ii. <u>Undertake random annual audits of Sub Catchment Collective</u> <u>Programmes including on member properties in relation to</u> <u>individual and programme implementation of programmed</u> <u>works, including nutrient management budgets where required,</u> <u>and progress towards Plan and Freshwater Objectives.</u>