IN THE MATTER **of the Resource Management Act 1991**

AND

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

TOPIC 2

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

("FEDERATED FARMERS")

Submitter with ID: 74191

To **WAIKATO REGIONAL COUNCIL**

("WRC")

STATEMENT OF REBUTTAL EVIDENCE OF PAUL FREDERICK LE MIERE FOR FEDERATED FARMERS IN RESPONSE TO BEEF + LAMB EVIDENCE DATED 10 MAY 2019

17 May 2019

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STATEMENT OF REBUTTAL EVIDENCE OF PAUL FREDERICK LE MIERE

Introduction

1. My full name is Paul Frederick le Miere. A full description of my qualifications and experience is contained in my statement of evidence for the Topic 1 hearing dated 15 February 2019. I have also filed a statement of evidence for the Topic 2 hearing dated 3 May 2019 and a statement of rebuttal evidence dated 10 May 2019.

2. At the time I drafted my rebuttal evidence, not all of the evidence on behalf of Beef + Lamb had been filed. Statements of Evidence for Ms Jordan, Dr Chrystal and Dr Cox were filed on 9 and 10 May 2019 and this statement of evidence contains my rebuttal evidence in respect of that evidence.

Beef + Lamb rule framework

3. When I drafted my rebuttal evidence, the proposed Beef + Lamb rule framework was not clear. After reading Ms Jordan's statement of evidence dated 9 May 2019, I now understand that Beef + Lamb's proposal is that the N allocations for each LUC class will be used to provide for the opportunity for low N leaching farmers to increase N as a permitted activity.

4. I understand that Beef + Lamb's proposal requires greater N reductions to be required from medium and higher N leaching farms by requiring those above a certain N leach or percentile to reduce, through a restricted discretionary activity rule. Ms Jordan has not specified the level they would need to reduce to in her track changes to PC1 but after reading her evidence I understand that she considers this could be the 60th percentile, although her preference is to specify a N leach rate (but has not done so at this stage). I understand that the intention is that these reductions will create the headroom for the lower N leaching farmers to increase.

5. I also understand that Beef + Lamb proposes that those in the middle band would need to obtain an NRP but they do not appear to be required to remain at that NRP. It appears that the intention is to control these activities by requiring them to remain below a certain N leaching rate or percentile for the FMU (no number is specified at this stage) and maintain an orange grade or less in the Fonterra Nitrogen Risk Scorecard.

6. Federated Farmers does not support the Beef + Lamb proposal. While we agree that a pathway ought to be provided for low leaching farming activities to increase nitrogen (where appropriate), we do not agree that providing a LUC N allocation for these farmers is appropriate or that requiring even greater reductions from medium and higher N leaching farmers is appropriate.

7. As explained in my earlier rebuttal evidence, Federated Farmers considers that it is premature to allocate nitrogen. By proposing a LUC N allocation for low intensity farmers, and by requiring greater N reductions from others, Beef + Lamb is putting forward an allocation approach. While I acknowledge that the PC1 approach could be considered an allocation approach, I consider that it is closer to the status quo and likely to cause less social and economic cost and disruption than the Beef + Lamb proposal. It more appropriately provides for further information to be gathered and a better understanding of water quality drivers, attenuation, sub-catchment forensics and the other work that is fundamental before any discussion about allocation.

8. Federated Farmers proposes that changes are made to PC1 to provide an opportunity for low N leaching farmers to increase through a sub-catchment and tailored FEP approach that would provide a pathway for activities where N might increase by a couple of kilograms as a result of a farmer undertaking work to mitigate other contaminants, e.g. a hill country farmer intensifying the stocking rate on the flatter parts of his/her farm in order to retire and plant steep gullies.

No FEP

9. Federated Farmers is concerned that Beef + Lamb's proposal focuses predominantly (and in many cases solely) on nitrogen. Forestry can convert to drystock or dairy under Beef + Lamb's permitted activity rule and drystock can intensify. These activities can happen without a FEP. While these activities have to comply with Schedule C and there are restrictions on activities like cropping, without a FEP there is no consideration of the critical source areas and contaminant pathways. Such consideration is important in the context of a catchment where many of the E coli and clarity targets are many times over where we want to be.

10. In addition, without a tailored FEP, there would be no opportunity for farmers to propose alternative mitigations to the stock exclusion and setback

standards in Schedule C. As explained my evidence dated 3 May 2019, flexibility to consider alternative mitigations is critical for many hill country drystock farms where the costs of things such as water reticulation are excessive.

Costs for dairy and drystock

11. Federated Farmers is also concerned about the likely significant cost for dairy and many drystock properties if greater N reductions are required. Dr Doole's modelling for CSG shows the significant economic cost on the dairy sector as a result of PC1. By lowering the 75th percentile, Beef + Lamb will effectively put greater cost on the dairy sector but also the drystock sector. Around 22% of the catchment is currently intensive drystock (this will include things like dairy support or dairy grazing, sheep and beef finishing operations, bull fattening, cropping or a mix of these systems). I have not seen any consideration in any of Beef + Lamb's evidence of the cost of its proposal on these farmers.

12. As explained in my earlier rebuttal evidence, there is no fair and equitable way to allocate nitrogen. I understand the concerns of low leaching N farmers that PC1 effectively locks them into remaining low leaching, at least for the duration of this plan. I also understand the concerns of more intensive drystock and dairy farms that have invested in their businesses and complied with the rules that applied to them at the time, but would be required to reduce N (by changing land use or their farm system or farm type) and incur significant cost, so that low N leaching farms have the opportunity to increase.

13. I have not seen anything in Beef + Lamb's evidence about what opportunities low N leaching farms want to take advantage of. In my discussion with our members during the development of our submission on PC1, we understood the concerns of low N farms to be around the need for flexibility to respond to economic or environmental conditions. There was a need to recognise that the years chosen for the reference period were not necessarily reflective of the N leaching of their activity. There was a need to provide for the ability to farm the good years and the bad years. There was also a need to recognise that N is not the issue for many sub-catchments, that PC1 ought to incentivise water quality improvements and that rigid adherence to a NRP might not

provide for that (particularly for farms without the financial resources to fund mitigations).

14. Federated Farmers considers that these concerns can be addressed without providing an allocation for low N leaching activities. Our track changes to PC1 provided for things like flexibility with FEPs, five year rolling average and the ability to increase N (depending on the sub-catchment and effect on other contaminants) as a means to address these concerns.

15. Federated Farmers is concerned about the unintended consequences of providing an N allocation for low N loss farmers. These include that significant cost is imposed on other farmers in order to create headroom but then that headroom is not taken up. Alternatively, the headroom is taken up but it is not enough and the 10 year targets are not achieved. In the meantime, it is likely that significant cost and unnecessary change is imposed on the farming community.

Creation of headroom

16. At paragraph 116 of her evidence, Ms Jordan states that creating headroom and then allocating a maximum N load is necessary in an over allocated catchment to give effect to the NPS-FM. I do not agree. I have been involved in many processes (both at a national policy level and a regional council planning level) involving the NPS-FM and its application. There is nothing in the NPS-FM that requires allocation or requires the creation of headroom so that N can be re-allocated.

17. In support of her views, Ms Jordan appears to rely at paragraph 117 of her evidence on the parts of the NPS-FM which require the avoidance of over allocation and the management of freshwater to provide for productive economic opportunities. Federated Farmers' position is that this can be achieved without allocation of nitrogen.

18. At paragraph 37 of her evidence, Ms Jordan states that she considers that PC1 locks in existing land use patterns and emissions and the costs to the sheep and beef sector are considerable. This is not consistent with Dr Doole's modelling for TLG.

19. Table 6 of Dr Doole's August 2016 report shows that the dairy sector is hit much harder (four times the reduction in loss in value add) than the dairy sector.[1] The loss in value add for dairy is $80m ($108m if dairy product manufacturing is included) and loss in employment is 796 jobs (901 if dairy product manufacturing is included). By comparison, the loss in value add for the sheep, beef and grain sector is $24m ($28m if meat and meat product manufacturing is included) and loss in employment is 196 jobs (233 if meat and meat product manufacturing is included).

20. Dr Doole's modelling shows that it is the dairy sector that bears the brunt of PC1. Further, at paragraph 2.2 of his evidence dated 3 May 2019, Dr Doole states that higher levels of abatement are expected to incur substantially greater cost and that given the key role the dairy sector plays in the Waikato and New Zealand economy, requiring greater N reductions from this sector will have major economic implications.

21. Accordingly, Federated Farmers is very concerned that the Beef + Lamb proposal will have significant economic cost (and potentially worse environmental outcomes) but this does not appear to have been modelled or considered.

Water quality

22. At paragraph 73 of her evidence, Ms Jordan refers to amending Table 3.11-1 to include instream allowable loads and maximum allowable zone loads for N in all sub-catchments. This is coupled with the allocation of N to a property level based on LUC (for low N leaching activities). Federated Farmers considers that it is premature to set loads or limits for this catchment and disagrees with Ms Jordan's statement at paragraph 73 that it would provide "clear, enforceable limits that enable communities to provide for their economic wellbeing."

23. As explained in my evidenced dated 15 February 2019, I consider that PC1 is myopic in its focus on nitrogen, that all four contaminants need to be considered in order to improve water quality and there is still great uncertainty around source, sink and transport pathways for contaminants (including issues

[1] McDonald, G and Doole, G "Regional and national level economic impacts of the proposed Waikato Regional Plan Change No. 1 – Waikato and Waipa Catchments" 12 August 2016, Doc # 8954531.

like attenuation, which is poorly understood). It is premature to consider allocation in the context of these uncertainties and lack of scientific research and understanding.

24. It is also premature to consider allocation, and locking in loads, when there are uncertainties about the measurement of nitrogen and water quality effects of the 10 year targets (or the 80 year targets they are derived from). I raised this in my evidence dated 15 February 2019 and am not the only one who has raised these isseus.

25. For example, Dr Olivier Ausseil's evidence for the Waikato and Waipa River Iwi makes the points that water quality testing typically has 15-20% uncertainty, which impacts on our understanding and estimates for current state.[2] He also raises issues with the TLG and CSG methodology for calculating the targets (e.g. the "band up" approach), particularly when considering the relationship between chlorophyll a with TN and TP. Similar issues are raised by Dr Douglas Edmeades for a farmer in Te Kauwhata,[3] Dr Edmeades also raises issues about the use of Overseer in a regulatory setting and uncertainties inherent in that approach.

26. At paragraph 75 of her evidence, Ms Jordan refers to trading and how the adoption of instream N load limits would enable transfer regimes to be implemented. While there may be merit in providing for transfers of N, Federated Farmers is very concerned that it is premature to consider allocation of a tradeable or transferrable right or entitlement. From my involvement in the Land and Water Forum and Partnership, as well as three other regional plans involving N allocation, I am not aware of any N trading system (locally or overseas) that has been successful or can be relied upon to achieve an efficient and effective outcome.

Agribase

27. At paragraph 31 of her evidence, Ms Jordan relies on data from Agribase to show that dairy farm land has increased by 26% since 2006 and dyrstock has reduced by 2%. Dr Cox has also relied on Agribase to calibrate the model he has used to show the impact of three potential N allocation approaches if the

[2] Statement of Evidence of Michel Nicolas Ausseil dated 15 February 2019 at [67] and [68].
[3] Statement of Evidence of Douglas Charles Edmeades dated 10 May 2019.

80 year targets are to be achieved. I consider that caution ought to be exercised when relying on numbers generated by Agribase.

28. Federated Farmers uses Agribase for a range of statistics. We have found that it is useful for providing an indication of trends. However, we have found that it contains a number of inaccuracies and cannot be relied on as being an accurate reflection of reality or the sole (or primary) basis for policy decisions.

29. Earlier this year we carried out a data accuracy study of Agribase. We selected 36 members (one from each of our 24 provinces, and a couple of double ups) to compare their farm data against Agribase. The intention was to identify the types of inaccuracies contained in Agribase and to better understand the limitations in its use.

30. The key findings of our investigation were:

    a. The majority of farms studied (80%) had never been visited by AsureQuality and did not know how their details were updated in Agribase.

    b. For 40% or more of those we studied, the personal names and physical farm addresses were not correct.

    c. For 44% of those we studied, the size of their farm was not cored.

    d. The farm type was correct for 72% of respondents but there were details missing about the farm for all of them.

31. I acknowledge that this was a low sample size and it was spread out across the country. But it did indicate that Agribase has some limitations.

32. When data like farm type is entered into Agribase, the farm type is self selected by the farmer or consultant or other person entering the data. There are many categories to choose from, some appear to be mutually inclusive and some do not appear to be logical.

33. The farm types (code and description) are set out below:

Farm Type Code	Farm Type Description
ALA	Alpaca and/or Llama Breeding
API	Beekeeping and hives
ARA	Arable cropping or seed production
BEF	Beef cattle farming
DAI	Dairy cattle farming
DEE	Deer farming
DOG	Dogs
DPL	Dairy Plant/Factory
DRY	Dairy dry stock
EMU	Emu bird farming
FIS	Fish, Marine fish farming, hatcheries
FLO	Flowers
FOR	Forestry
FRU	Fruit growing
GOA	Goat farming
GRA	Grazing other people's stock
HOR	Horse farming and breeding
LIF	Lifestyle block
MTW	Meat Slaughter Premises
NAT	Native Bush
NEW	New Record - Unconfirmed Farm Type
NOF	Not farmed (ie idle land or non-farm use)
NUR	Plant Nurseries
OAN	Other livestock (not covered by other types)
OPL	Other planted types (not covered by other types)
OST	Ostrich bird farming
OTH	Enterprises not covered by other classifications
PIG	Pig farming
PKH	Packhouse
POU	Poultry farming
RAB	Rabbit breeding and farming
RET	Retail
SHP	Sheep farming
SHW	Showgrounds
SLY	Saleyards
SNB	Mixed Sheep and Beef farming
TOU	Tourism (ie camping ground, motel)
UNS	Unspecified (ie farmer did not give indication)
VEG	Vegetable growing
VIT	Viticulture, grape growing and wine
ZOO	Zoological gardens

34. Our experience is that this can lead to issues in identifying farming activities or land types and can have impacts on such analysis. For example, there is no dairy support category but farmers might identify this by listing the activity as dairy drystock (DRY) or grazing other people's stock (GRA). Likewise, a sheep and beef farmer might just look at the DRY category and list their activity under that heading (without reading the description that indicate it is intended to capture dairy cattle that are no lactating).

35. It is not possible to separate out intensive drystock from extensive drystock. Any consideration of drystock needs to consider multiple categories and that there may be farms erroneously recorded e.g. to consider sheep and beef farmers, it would be necessary to look at beef cattle farming (BEF), sheep farming (SHP) and mixed sheep and beef farming (SNB). As explained above, there may also be sheep and beef farmers who have categorised their farm as DRY thinking it was drystock.

36. I am also aware that there can be delays in updating the Agribase data. For example, one of our members in the Waikato purchased a sheep and beef property eight years ago and shortly after purchase converted it to dairy. However, the property is still recorded as SNB.

Staged approach

37. At paragraph 46 of his evidence, Dr Cox states that PC1 ought to be more prescriptive in setting out a feasible pathway for achieving the 80 year targets and at paragraph 49 he states that either an equal allocation or LUC allocation would be a feasible pathway.

38. As explained above, Federated Farmers' position is that it is premature to allocate nitrogen. We consider that the focus for this plan change ought to be on the staged implementation of the Vision & Strategy. That means adopting good farming practices through tailored FEPs. Dr Doole's modelling has shown we can make good progress from focusing on the "low hanging fruit."

39. Federated Farmers is concerned that Beef + Lamb's proposal is unlikely to make this progress. It provides for intensification of drystock activities without the need to obtain FEPs and without consideration of addressing critical source areas and the other three contaminants. Federated Farmers is also concerned that Beef + Lamb's proposal is not a staged implementation (or

even an appropriate implementation) of the Vision & Strategy for the vast majority of farmers that would be required to make significant N reductions in the next 10 years.

40. Dr Cox's modelling has shown that an equal allocation or LUC allocation of the 80 year targets will mean close to 100% afforestation of pastoral land (particularly in the Upper FMU). This is consistent with the TLG's modelling that there are not sufficient tools available to achieve the N mitigation required by the Vision & Strategy.

41. There is still a lot of progress to be made in the scientific research and understanding about both the catchment, N mitigations and relationship with water quality. Accordingly, it is premature to attempt to set out a pathway to achieve the 80 year targets – no feasible pathway exists at present.

N and water quality

42. In Figure 2 on page 9 of his evidence, Dr Cox presents pie charts showing the sources of N by land use at six catchments (based on his re-calibrated model). As explained in my earlier rebuttal evidence, this ignores the other contaminants and water quality issues in each sub-catchment. In Figure 1 on page 6 of my 10 May 2019 rebuttal evidence, I set out the pie charts prepared by Jacobs showing all four contaminants by land use.

43. The focus on N does not focus on water quality and does not focus on values like swimmability. As explained by Dr Ausseil, TN and TP are leavers for controlling chlorophyll a (algal blooms) and the key driver of this TP not TN.[4] Further, the TN targets were set independently from TP and chlorophyll a so focusing on rigidly adhering to TN targets may not achieve the desired water quality states or values.

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[4] Statement of Evidence of Olivier Michel Nicolas Ausseil dated 15 February 2019 at [82], [103] and [105].