BEFORE THE ENVIRONMENT COURT

IN THE MATTER OF	appeals under clause 14 of the First Schedule to the Resource Management Act 1991 concerning Proposed One Plan for the Manawatu-Wanganui Region
	FEDERATED FARMERS OF NEW ZEALAND ENV-2010-WLG-000148
AND	**MINISTER OF CONSERVATION ENV-2010-WLG-000150**
AND	**DAY, MR ANDREW ENV-2010-WLG-000158**
AND	**HORTICULTURE NEW ZEALAND ENV-2010-WLG-000155**
AND	**WELLINGTON FISH & GAME COUNCIL ENV-2010-WLG-000157**
	Appellants
AND	**MANAWATU-WANGANUI REGIONAL COUNCIL**
	Respondent

STATEMENT OF EVIDENCE IN REPLY OF SHANE ALEXANDER HARTLEY ON THE TOPIC OF SURFACE WATER QUALITY – NON-POINT DISCHARGES ON BEHALF OF FEDERATED FARMERS

INTRODUCTION

1. My name is Shane Alexander Hartley. I have the qualifications and experience set out in my evidence in chief, dated 2 April 2012.

2. My further evidence is in respect of the outstanding matters following planner conferencing held on 4 and 5 April 2012 as is summarised in the planning conference record dated 16 April 2012 and in particular, the main issues I addressed in my evidence-in-chief, which were;

   a. the use of LUC as a base for determining nitrogen leaching rates,

   b. the provision of a permitted activity rule for dairy farms in the relevant Water Management Sub Zones, and

   c. the meaning of the term "reasonably practicable".

3. I address the key outstanding matters discussed in conferencing that were either not agreed or were agreed to be set aside until more information became available.

Amendment to Objective 6-1

4. Amended wording of Objective 6-1 was extensively discussed at the Planners Conferencing and final agreement was not able to be reached. On balance I consider the wording accepted by all planners other than Mr Willis was appropriate. In this respect I consider that the expression "are managed in a manner which safeguards life supporting capacity" in the context of the rest of the Objective declares an aim of protecting and not diminishing the existing life supporting capacity of water.

5. In this respect I do not consider that the phrase could or should be interpreted to suggest that waters that have lost or have reduced life supporting capacity must be necessarily returned to their original condition (whatever that may have been). This is not my understanding of the term "safeguard", for which two dictionary definitions are;

- To protect something or someone from being harmed or having problems[1]
- To ensure the safety of, protect[2]

6. The intention to safeguard the extant water quality and to see how an overall improvement is highlighted by the second part of the objective.

Changing Policies 6-1 to 6-1 to refer to 'limits' rather than 'numerics'

7. I have further considered the views expressed by Ms's Marr and Sweetman, and Mr Percy that the term 'numerics' as agreed in the mediated provisions should be replaced by the term 'limits'. In my opinion this change is inappropriate as it applies a quite different meaning and intent to the provisions than was intended by the Council, as is clearly illustrated in the Hearing Panel's decision in which it stated

> *In terms of these matters, we note that the background water quality and the Region's rivers exceeds the Schedule D standards in some cases. It is therefore nonsensical to require discharge activities to comply with the Schedule D standards in all cases. This is the same problem that plagued the implementation of the operative Manawatu Catchment Water Quality Plan. We therefore accept the submissions of PNCC and we find that the Schedule D standards are not intended to be standards in terms of s 69 RMA, notwithstanding the fact that several of the Chapter 13 rules require compliance with the Scheduled D standards.*[3]

8. I accept and acknowledge that the National Policy Statement on water quality refers to the term "limit" as is comprehensively described in Ms Sweetman's evidence. However, my understanding is that the One Plan water quality provision - including schedule D - have been developed on a different basis, as is highlighted by the Hearing Panel's decision, partly quoted above.

9. I consider that it is inappropriate to attempt to 'splice' the term 'limits' developed under the NPS onto into One Plan policies which have been derived on a different

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[1] www.macmillandictionary.com

[2] www.thefreedictionary.com

[3] Para 4; 8-22 Water Hearing Decision Report; One Plan; Horizons Regional Council

basis. This should only be undertaken in a comprehensive way, taking the NPS into account, and ensuring that the basis of the One Plan (including Schedule D) is both internally consistent, and an effective and realistic methodology.

Land Use Capability Classification Approach

10. In my evidence in chief, I observed that the current regulatory regime is focused on dairy farming activities and a range of other farming activities should logically be included. The planners conferencing acknowledged the implicit limitation in only regulating dairy farming, where it was agreed that "*all parties agreed that if only some activities are regulated, that will affect what can be expected to be achieved, at the catchment level. For example if only dairy farming is regulated then we can only expect the contribution of N from dairy farming to reduce, the contribution of other land uses could not be predicted*".[4]

11. It was also agreed at the planners conferencing that a wide range of rural activities contribute towards degradation, "*including: dairying, intensive sheep and beef, cropping and horticulture*".[5]

12. The conferencing record sets out a list of criteria for determining management options for different land uses.[6]

13. These joint conclusions confirm my belief that the current rule regime - focused on dairy farming and based on an LUC approach - is at best limited in its effectiveness, and at worst, seriously flawed. Although I understand the logic behind the LUC methodology, I find it difficult to correlate the likely best results from this approach with the outcomes sought for water quality in the region (i.e. the relevant water quality objectives in Chapters 6 and 13).

14. In regard to the scope of the rule regime, I concluded in my evidence-in-chief that all other significant nitrogen leaching land uses (in both per hectare and gross hectare

[4] Item 23, planners conferencing record, 4 and 5 April 2012
[5] Item 17, planners conferencing record, 4 and 5 April 2012
[6] Item 20, planners conferencing record, 4 and 5 April 2012

terms) should be included in a regulatory approach alongside dairying. I note that Ms Marr also has this view as does Mr Percy, and to a more limited extent, Ms Barton. Ms Marr also concludes that it is desirable and feasible for transient land to be regulated. That remains my view too. I consider that the proposed rules Ms Marr set out in her Appendix 1 in regard to providing for a wider range of farming activities are generally appropriate, except as will need to be amended to:

i. accommodate the nitrogen trading regime proposed by Mr Percy (which I agree with for the reasons I discuss below); and

ii. include provision for permitted activities in the way proposed by Mr Hansen, except for the extension of a permitted activity rule to include the wider activities identified in Ms Marr's draft controlled activity rule.

15. However, Ms' Marr and Barton, and Mr Percy remain committed to the LUC approach (in various forms) and do not support any alternative approaches, such as a single N cap, which I have identified in my evidence-in-chief as being potentially a more effective and equitable approach. The main reason for not favouring a single N cap amongst those planners supporting the LUC approach, seems in essence to be that it is "... *contrary to the principle of managing the land according to its natural capital*", as Ms Barton puts it. [7]

16. Ms Marr assesses a range of nitrogen regulatory management approaches in Section 2.3.4 of her evidence-in-chief. Here she assesses the LUC approaches under the DV POP, NV POP, and the 'hybrid' LUC approach proposed by Ms Barton in her evidence-in-chief; and a single number N loss cap. Ms Marr concludes that "*Based on this evidence, I consider that the MV POP approach (with year 20 nitrogen leaching maximums) will be the most effective option at achieving the objective and implementing the policies*".[8]

[7] Para 3, section 118 (ii), Clare Barton Evidence in Chief
[8] Para 159, Helen Marr; Surface Water Evidence in Chief

17. However, I am unclear as to why, in regard to a single N cap loss number, Ms Marr concludes only that "*a single N loss cap number may maintain water quality, if it is set at lower than 24/kg/n/yr (sic).*" [9] In this regard, the same number of 24 kg/ha/yr is also referred to in Ms Barton's evidence-in-chief, where she voices a preference for managing the land according to natural capital, and in respect of a single N leaching number, she notes that it would "... *need to be set at a low threshold if the environmental outcome in river of maintenance of water quality is to be achieved*", referring to the evidence of Dr Roygard which "... *confirms a single N threshold number of around 24 would need to be set to as a minimum maintain (sic) water quality*".[10]

18. In any case, even if a single N threshold of 24 kg/ha/yr will not achieve the water quality outcomes sought, there will assumably be an N number that would be low enough to do so. In other words, an appropriate N number must logically at some point achieve at least the same, and likely (once a suitable N number is selected) better, results than any one of the three LUC options currently 'on the table'.

19. It occurs that the preference for the LUC methodology might also be because it involves "directing" land use activities to certain land use classes, as is suggested by Ms Barton in the same paragraph I have partly quoted above;

> *The effect of a single number will allow all classes of land to be developed for any land use irrespective of its suitability for the land. Whilst in theory LUC class IV and above land is not leaching any more than the lower classes (i.e. I to III) to achieve similar levels of production will require greater inputs which requires greater reliance on infrastructural assets and imported feed which in turn if the total loadings from a catchment prove to be too high will cause proportionately much greater hardship in future years if the loads have to be reduced to achieve water quality outcomes.*

20. In this context, the LUC approach is essentially being applied as added insurance for the possible land use impacts of the currently proposed N limits having at some future time to be lowered considerably to achieve the water quality numerics being sought

[9] Para 165 Helen Marr, Surface Water Evidence in Chief
[10] Section 118, (a) (ii); Clare Barton, Surface Water Evidence in Chief

by the Plan. In other words, the belief is that it will be those landowners and farmers on the highest quality land that which will have some ability to continue farming without too much hardship.

21. I do not consider that there is a need to provide for future land use flexibility to this extent. While a precautionary approach is a valid concept, there is evidence to suggest (including Messer's Edmeades, and Dalrymple) that LUCs are not necessarily the key determinant of the viability, or leaching rates, of farming activities, and that therefore farmers and technology are likely to have the ability to respond to further reductions in an N cap.

22. In my evidence-in chief I concluded that land uses other than dairy farming would need to have a lower N discharge cap so that the average N level required to achieve the water quality outcomes sought across the catchments or sub-catchments would not be exceeded. This was to enable existing dairy farms exceeding the applicable N threshold to continue to operate (the approach I outlined has some similarities to the 'grandparenting' option offered by Mr Willis in his evidence-in-chief.) [11]

23. However, having considered the range of planner's evidence and further reflected on other evidence (in particular Messer's Day and Dalrymple) that discusses these matters, I have modified my position. Any approach that provides a higher N cap for dairy farming activities over other land uses (whether or not they are existing or potential dairy farms) will give some dairy farms at least a disproportionate (and therefore inequitable) share of a common scarce resource, and I have come to the view that a single N number should be applied on a per hectare basis across a catchment, applicable to all farming land uses generating significant amounts of nitrogen either at a per hectare or cumulative (proportion of catchment) level.

24. If the focus of the rules is to remain only on dairying, and accepting what appears to be a relatively low level of benefit in terms of any significant water quality improvements, under the currently proposed approach, I consider that the alternative to the option I have outlined above is to apply essentially a "best practice" rule

[11] Paras 1.35 to 1.42 Shane Hartley evidence-in-chief

requirement on both existing and new dairy farms - one of requiring nutrient management plans to be prepared and copied to Council, with the intent that a more rigorous and comprehensive rule regime will be introduced if monitoring shows that water quality is not improving, or at worst, being maintained. Such an approach is also consistent with the landowner advice and assistance concepts and actions set out in Method 6-7 for identified Water Management Sub-zones with nutrient issues.

Nitrogen Trading

25. If the necessary N cap set across a sub-catchment is sufficient to achieve the water quality outcomes sought (whether the LUC approach or a single number), it seems likely that a number of dairy farms will be above the prescribed cap (noting, for example, Mr Willis' references to the average N loss for dairy farms in the region being around 22 to 22.7 kg/ha/year)[12]. The nitrogen trading option described in Messer's Day's and Percy's evidence-in-chief is a method that needs to be included in my opinion if an N cap rule is applied, and the rule is to be both;

(i) equitable for all farmers and landowners; and

(ii) reasonable (in providing options other than farm management changes for farms that are in excess of the cap).

26. I have considered Mr Percy's proposed nitrogen trading provisions (Appendix 1) and consider that these have the fundamentals required for a nitrogen trading regime. However, Mr Percy's provisions have been incorporated into the amended provisions proposed by Ms Marr and as such maintain the basic LUC approach, except as generally amended to reflect her preference for provisions closer to the NV POP.

27. As I have said above, I consider that it is necessary that a permitted activity rule be incorporated in a manner as is proposed by Mr Hansen for essentially 'compliant' nitrogen generating activities. Mr Hansen has modelled his rule only on dairy farming activities, but I consider that this should be extended to include the wider

[12] Section 66, Gerard Willis Evidence-in Chief

range of nitrogen generating farming activities as occurs in Ms Marr's draft rule. The only difference is that I believe that this can be adapted into a permitted activity rule for the wider activities. In this respect, if a farming activity can only become compliant by utilising nitrogen trading, then that needs to be accommodated within a controlled activity rule. This is because both the receiving and donor properties in regard to nitrogen will need to have appropriate consent conditions that recognise and limit the extent to which that trade has occurred and the nature of activities within both those properties as is set out in Mr Percy's evidence-in-chief.

Shane Hartley

20 April 2012