

IN THE MATTER OF
1991

The Resource Management Act

AND

IN THE MATTER OF

Lake Rotorua Nutrient Management –
PROPOSED PLAN CHANGE 10 to the
Bay of Plenty Regional Water and Land
Plan

**STATEMENT OF EVIDENCE OF STEPHEN GUY LAMB
ON BEHALF OF THE BAY OF PLENTY REGIONAL COUNCIL**

Rebuttal Evidence

Qualifications and experience

1. My full name is Stephen Guy Lamb. I am employed by Bay of Plenty Regional Council as the Manager of the Natural Resources Policy Team. A full description of my qualifications and experience is contained within my evidence in chief.

Scope of Evidence and Summary

2. My evidence is in response to expert evidence provided by:
 - a. Christopher Adrian Hansen on behalf of Ravensdown Ltd
 - b. Lindsay Moore on behalf of himself and Alison Moore
 - c. Philip Mark Osborne on behalf of Rotorua Lakes Council.
3. My evidence covers the following matters:
 - a. Trading of Nitrogen Discharge Allocations prior to 2022
 - b. Assumptions underpinning Proposed Plan Change 10 (PPC10)
 - c. Natural Capital as the basis for allocation.

Background materials and reports referenced

4. In the course of preparing this evidence, I have had regard to the following documents:
 - a. The Section 32 Evaluation Report – Lake Rotorua Nutrient Management Rules Plan Change 10. Bay of Plenty Regional Council (December 2015).
 - b. The Section 42A Report – Lake Rotorua Nutrient Management Plan Change 10. Bay of Plenty Regional Council (January 2017).
 - c. Market Economics Limited (2015). Economic impacts of Rotorua nitrogen reduction: District, regional and national evaluation. Report prepared for the Bay of Plenty Regional Council. (ME 2015).
 - d. Parsons O, Doole G, Romera A (2015)(1). On-farm effects of diverse allocation mechanisms in the Lake Rotorua catchment. Report prepared for the Lake Rotorua Stakeholder Advisory Group. (Parsons et al.).

Trading of Nitrogen Discharge Allocations prior to 2022

5. I have reviewed the expert evidence of Christopher Hansen acting on behalf of Ravensdown Ltd and Philip Osborne acting on half of Rotorua Lakes Council and I

wish to respond to the matters raised around the restrictions on the transfer of Nitrogen Discharge Allocations prior to 2022.

6. PPC10 contains a trading mechanism that is designed to provide flexibility for properties/farming enterprises and to enable economic efficient outcomes. This trading is prevented from occurring by the Proposed rules until 01 July 2022. Prior to this, the contractual removal of NDA is not a transfer of NDA (see Schedule LR Seven).
7. The key driver behind the PPC10 position of restriction trading to post-2022 is not an economic one but rather a risk management one. The matter is discussed in the Section 32 Report (section 10.7) and further in the Section 42A Report (paragraph 118 and 119).
8. Mr Hansen's evidence at paragraph 74 outlines, in response to a submission point, the Regional Council's position. The key concern expressed by me in that position is that competition may undermine the ability for the Incentives Scheme to achieve its target. No evidence is provided for his view that this concern may be "fanciful".
9. The position has been driven by assessment of risk – the risk that the Incentives Scheme will not be able to meet its targets. The Incentives Scheme target is described as a community commitment – to the tune of \$40 million. It has been noted that achieving the purchase of a 100 tonne reduction in the nitrogen entering the Lake will be a challenging task. The fact that the Incentives Scheme needed to start in an environment of uncertainty before rules were made operative, the issue of changing OVERSEER[®] versions, it is a thin market and there is information asymmetry (the sellers are potentially better informed) all contribute to making achieving the target a challenge.
10. Simply put, anything that adds to this challenge – such as competition – further increases the risk that the necessary purchase will not be possible. As the community (through the Regional Council) is carrying the risk, if trading was to be unrestricted then it would also be appropriate to include policies within PPC10 that at 2022 any unsecured portion of the 100 tonne Incentives Scheme target may be reallocated to the pastoral sector. Resource consents could then contain review conditions to enable this to occur.
11. This is because the achievement of the reduction of that 100 tonnes is a necessary part of the required reduction agreed to in the Integrated Framework. While it is

called an “Incentives Scheme” it could equally be termed a “rules substitution scheme”. If the risk profile changes then there is no guarantee that the two core funders (the Crown and the Regional Council) would maintain support.

12. Mr Osborne in paragraph 59 of his evidence raises the issue of the short term impact on the economy through restrictions on land use change. As explained above, evaluating the economic impact has not been the focus of this element of the Integrated Framework. If there was a limitation on urban development it would come from a subdivision of rural land not having enough nitrogen loss to offset its increased discharges (sewage from houselots).
13. Recent work on a proposed accounting mechanism for increase urban discharges shows that creating residential low density zoned land would require 25.7 kg nitrogen per hectare (noting that this is a generalised assessment and that all subdivisions are different). Under PPC10 the average for drystock land is 25.6 kg nitrogen per hectare. Any dairy blocks included in the land being subdivided or higher drystock nitrogen discharge allocations would increase the capacity for subdivision as would any balance lot being retained as pastoral (as these can operated at lower intensities to balance any shortfall).
14. It is therefore not considered that there is any significant limitation on urban growth through the five-year period to 2022 and no economic analysis is required on this point.

Assumptions underpinning Proposed Plan Change 10

15. I have reviewed the expert evidence of Lindsay Moore on behalf of himself and Alison Moore. This evidence describes a compelling story about Lake Rotorua’s issues through time and that the community has been grappling with them over a large number of years.
16. I wish to respond to the conclusion reached by Mr Moore on page 10 and 11 of his evidence where he states that the Regional Council has made unreasonable and perverse assumptions in adopting PPC10.
17. Assumptions 1 to 3 have been responded to in more detail by Andrew Bruere however all three are positions established on a scientific basis.
18. It is perhaps unfair to label point 4 as an assumption as it can more accurately be described as a position developed through the Lake Rotorua Catchment Stakeholder

Advisory Group (StAG) collaborative process. This process has been described at length in the Section 32 Report and Section 42A Report.

19. The last point he makes is a comment that has been heard a number of times through the process of developing PPC10. It is important to note however that the Regional Council has not at any time worked from an assumption that dairy farming as a sector is entitled to special treatment. The process has always been underpinned by the phrase “everyone needs to be part of the solution”. The allocation process as discussed in my evidence in chief at paragraph 94 combines a number of elements including grandparenting. Grandparenting does favour existing uses however in the case of PPC10 the following factors also need to be considered:
 - a. The Integrated Framework includes a larger sector % reduction for dairy than for drystock – 35.3% as opposed to 17.2%. Dairy farming is therefore contributing a greater degree of nitrogen reduction.
 - b. Consequently, the dairy sector is also contributing a significantly largely proportion of the total reduction in tonnes required under the rules (see Table LR 2).
 - c. The allocation methodology (see Schedule LR One) requires more substantial reductions from high nitrogen loss farming operations. For dairy the start point for all dairy blocks is reduced by 31.3%. The higher loss blocks are then reduced further to the top of the range. So within the Dairy Sector the individual operations with higher losses contribute proportionally more of the reduction.
20. The dairy sector was represented on StAG as were the drystock sector, small blocks, and deer. There were more drystock affiliated members than dairy.
21. The allocation used the RPS principles that included the consideration of existing land use and existing on-farm investment.
22. While I appreciate why this sentiment is being expressed it is therefore not correct to say that through the process that the dairy sector was seen as being entitled to special treatment or that it received special treatment.

Natural Capital as the basis for allocation

23. I have reviewed the expert evidence of Philip Osborne and James Fuller on behalf of Rotorua Lakes Council and I wish to respond to the suggestion that natural capital offers a better alternative option to a grandparenting allocation method. I would point out here that the PPC10 allocation approach is a sector range approach, which has

an element of historical allocation, but doesn't reward nitrogen losses in excess of sector norms.

24. Mr Osborne and Mr Fullers concerns are centred around fairness and equity, and around economic efficiency of land use. No evidence has been provided that a natural capital approach would be a better option for allocation.

Fairness and Equity

25. Fairness and equity are also raised in the evidence provided on natural capital (such as in Mr Osborne's evidence at paragraph 32 and 44. The view of fairness and equity is simply a product of the standpoint someone is looking at an issue from. For example, is it fairer and more equitable that someone loses existing capital value or that someone loses the option of further developing their land? Is it fair and equitable that someone receives a nitrogen allocation that they do not require to continue their business operations, while someone who does need it doesn't receive it? Obviously these examples are cases in point for PPC10.

26. For PCC10 fairness and equity have been debated through the StAG process and have been guided by the RPS and StAG principles for allocation amongst land use activities. The RPS principles (that can be taken as the community mandated standpoint) that specifically support the sector range allocation are:

- a. Extent of the immediate impact
- b. Existing Land use
- c. Existing on farm capital investment
- d. Ease of transfer of the allocation

27. The remaining RPS principles are either neutral (in that they apply to both such as *Equity/fairness, including intergenerational equity*) or are not as specifically supportive either way of natural capital or the PCC10 allocation approach. For example, the Crown obligation referred to is taken to mean that any land returned under Treaty Settlement provisions is returned at fair value including any regulatory impositions (such as Rule 11 limitations on increased nitrogen loss).

28. All of the StAG principles (paragraph 32 of Mr Osborne's evidence) support the PPC10 allocation approach.

29. Based on the standpoint provided by the community-based principles it is my opinion that the PPC10 allocation approach is fair and equitable and is preferable to a natural capital approach.
30. A critical point when considering fairness and equity is that Lake Rotorua is a significantly nutrient constrained catchment and the degree of reductions required restricts the scope of options to address any perceived unfairness or inequity. The PPC10 allocation approach imposes not insignificant costs on existing farming operations and this should be recognised before any reallocation is considered. For example, Gemma Moleta's evidence shows that to create equality of development for forestry land with the drystock sector a substantial reallocation of nitrogen loss is required with a corresponding economic impact (Moleta evidence, paragraph 42). Ms Moleta's evidence also discusses the same issue for underutilised Māori land.

Economic inefficiency

31. Mr Osborne raises the issue of grandparenting locking in inefficient land uses. As in paragraph 23, I point out that PPC10 proposes a sector range allocation, not grandparenting.
32. An important issue is that in a nutrient constrained catchment the economic efficiency arguments hold less validity. The Lake Rotorua groundwater catchment will ultimately have significantly less nitrogen than the optimal allocation based on land type. A natural capital allocation would result in properties having less allocation than needed to achieve their natural capital potential. Conversely some land could have the optimal allocation, but other land would have to operate below its natural capital potential.
33. The policy setting for this situation becomes complex. Trading would be needed to ensure that the "most productive" land (which has sub-optimal allocation) could purchase NDA and be farmed to that optimal level. The complexity here is that the existing uses would have the greatest incentives to purchase the allocation, and many of the barriers that have inhibited development of higher quality, undeveloped land will still exist, such as access to capital, ability to service debt, and lifestyle choices.
34. The Parsons et al. report demonstrates that trading can remove distortions associated with the initial allocation in all scenarios – with corresponding impacts seen in revenue streams. Under efficient trading, natural capital and sector range

allocation achieve the same land use and economic outcome at the catchment level. The difference is therefore is a redistribution of wealth.

35. Different costs would be faced by different individuals under a natural capital approach. Ideally forestry on high natural capital land would fund conversion to dairy (e.g. dairy shed, fencing, effluent pond), whilst a dairy operation on the same class of land would simply continue business-as-usual. Conversely, a dairy farm on lower class land would have a big incentive to purchase nitrogen, having already made the investment in a dairy farm. A trading system would need to rigorously defend the principle of not farming above natural capital potential even though at a catchment level this would be irrelevant.
36. If, as Mr Osborne describes, natural capital provides for long term efficiency of land use (para 47), then trading would not be a logical addition as it would be nonsensical to allow nitrogen to be traded away from the optimum natural capital uses.
37. A strong efficiency argument can be mounted that the allocation should go to where the market price signal indicates – to incumbent businesses. Under PPC10 the catchment target will be met, and the cost of the nitrogen loss will be priced. Trading will lower the overall cost of reducing nitrogen in the catchment.

Range of other economic considerations

38. The analysis of natural capital that supports the PPC10 position shows that an allocation approach based on natural capital would be the most economically disruptive. The ME 2015 Report analysis shows that the impact on the local economy is significantly more for natural capital than the PPC10 approach when trading friction is assumed (see section 4.1 of the ME 2015 Report). However there are other aspects to be considered when looking at economic impacts.
39. The catchment analysis (Parsons et al.) is undertaken on an income/profit basis and this does ignore some aspects that on a financial basis or a distributional basis are important to consider. Chief among these is the impact of stranded assets. As the Parsons et al. modelling suggests the number of dairy cows drops significantly (by around 40%). The sale of assets such as herds and Fonterra shares is annualised in income streams when (for example) dairy farmers shift to other land uses, but the sunk costs relating to stranded assets such as milking sheds, races, fencing and effluent management systems are not accounted for.

40. At paragraph 34 Mr Osborne notes that the PPC10 approach recognises current investment in operations but not land. While the value of land is not generally relevant to evaluation of economic impacts there are potentially severe financial impacts on landowners and this has been recognised in the PPC10 process. The approach used by PPC10 does recognise the current investment in land as NDAs are allocated on a sector basis and property value is directly influenced by its current use. Regardless of any transition period used to reduce the impact, there is likely to be greater distributional impacts with a natural capital approach. The Parsons et al. economic analysis notes that the natural capital allocation has a greater impact on pastoral land because of the value transferred to forestry land. This would also mean a greater consequential concerns around levels of equity for pastoral farmers if land values reduced.
41. Other issues with natural capital include that every catchment has potentially different criteria for definition. For Lake Rotorua dry matter production was used. Some other jurisdictions use LUC classifications. Resistance to nitrogen loss could also be a primary driver – linking to the adverse effect more specifically rather than looking at theoretical productive potential. It is not clear what basis would create the best natural capital allocation – and again each will have winners and losers.
42. Natural capital also presents somewhat of a conundrum for Rotorua as some of the best land (at least on a LUC basis) is being used for subdivision and urban expansion. There would need to be a number of policy settings examined to ensure that non-farming uses such as subdivision, roading and recreation space were optimal uses of natural capital potential.

Conclusions

43. In relation to the restriction of Nitrogen Discharge Allocations prior to 2022 the evidence submitted provides no rationale to suggest that the restriction is inappropriate.
44. In relation to Natural Capital as the basis for allocation, no evidence has been provided that it offers a better solution than the approach in PPC10. Furthermore, on the basis of the standpoint of the community's views as expressed through the Regional Policy Statement the approach in PPC10 is fair and equitable.