

Before Hearing Commissioners at Palmerston North

under: the Resource Management Act 1991

in the matter of: Submissions on Chapters 6, 13 and 15 of the Proposed One Plan

between: **Fonterra Co-operative Group Limited**
Submitter

and: **Manawatu-Wanganui Regional Council**
Respondent

Statement of evidence of Matthew Glen Newman for Fonterra Co-operative Group Limited

Dated: 30 October 2009

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STATEMENT OF EVIDENCE OF MATTHEW GLEN NEWMAN

QUALIFICATIONS AND EXPERIENCE

- 1 My full name is Matthew Glen Newman. I am employed as an Economist with DairyNZ and have held this position since April 2005.
- 2 I graduated from Massey University, Palmerston North in 1997 with a Bachelor in Agricultural Economics and a Diploma in Rural Studies focusing on rural valuation and farm management.
- 3 I have practical dairy farm experience and was responsible for the management of a small herd in the Franklin District, South Auckland, upon graduating from Massey University.
- 4 I have over ten years experience in the role of economist for both Meat & Wool New Zealand Economic Service and DairyNZ. The role has a wide range of activities including conducting an annual economic survey of farm performance, forecasting average farm biophysical components and financial positions, and recording and analysis of industry statistics.
- 5 Recently, I have been involved in a number of projects involving industries and the Crown, such as the National Pest Management Strategy (Tb) Review and National Animal Identification and Traceability (*NAIT*). My role in these projects was to review cost-benefit analyses and to assess cost allocation for such activities. I have also advised the DairyNZ policy team on economic consequences to the dairy industry and impacts on regional and national economy in relation to the proposed Emissions Trading Scheme (*ETS*), the Waikato-Tainui River Settlement and Environment Canterbury's water use charging policy.
- 6 I am a member of the New Zealand Institute of Primary Industry Management and the New Zealand Society of Agricultural and Resource Economics.
- 7 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.
- 8 I am familiar with the Proposed One Plan (*POP*) to which these proceedings relate.

SCOPE OF EVIDENCE

- 9 My evidence will deal with the following:
- 9.1 A description of the contribution of dairy farming to the regional economy, and projected growth;
 - 9.2 Costs and benefits of the Rule 13.1 approach;
 - 9.3 Fonterra's suggested amendments;
 - 9.4 The efficiency of using the policies and rules in the POP to achieve the POP objectives.
- 10 I have read the economic evidence presented for Fonterra Co-operative Group Limited (*Fonterra*) by Dr Brent Layton at the Overall Plan Hearing. While I endorse his more general comments on the POP, this evidence focuses specifically on Rule 13.1 of the POP, and associated provisions of the POP designed to control nutrient loss.

SUMMARY OF EVIDENCE

- 11 Dairying is a major contributor to the Horizons regional economy and this is expected to continue for at least the next 20 years. This statement is backed up on page 45 of the Horizons One Plan Section 32 Report "*Agriculture, particularly pasture-based farming is the foundation of the Region's economy and is one of the key elements that have defined our social and visual landscape*".
- 12 NZIER has estimated that dairy cattle farming contributed 5.0% to Manawatu-Wanganui GDP and a further 2.0% was contributed by meat and dairy processing (in value added terms). Dairy farming (excluding young stock and support land) only occupies 4.8% of land in the Horizons Region, but makes a larger proportional contribution to the economy. The sector employs approximately 1,900 people directly on-farm and Fonterra employs a further 660 staff in manufacturing, transportation and research.
- 13 Despite the significant contribution dairying makes to the economy, growth of dairy farming in the Horizons Region has been modest over the last decade to 2007-08 compared to the growth in other regions and the potential for land use change in Horizons.
- 14 While there is potential for future growth due to suitable land for dairying, there are a number of factors that may restrict possible growth from occurring, including relative profitability, desire for change from existing land owners and policies and regulations that may inhibit current and potential dairy farmers.

- 15 I have modelled three different growth scenarios in order to determine the possible size of dairy farming in the Region to 2030. The assumptions and outcomes of this analysis are presented in the body of this evidence. It is my opinion that growth at the same rate as the last decade (Scenario 2) is the most likely of the three scenarios. On this basis dairying's contribution to the regional economy would remain as significant as it is currently until at least 2030. However, given the increasing environmental pressures and possible regulations and restrictions of resource use, growth could be slower than the past decade, particularly during the 2020s.
- 16 Horizons' Section 32 Report of the POP does not adequately inform good regulatory practice, particularly efficiency, as it fails to provide a comprehensive Cost Benefit Analysis demonstrating that benefits to society outweigh the costs of this regulation. Alternative approaches do not appear to have been considered, to determine if Rule 13.1 is the most cost effective way to achieve the outcomes. The Section 32 Report does not describe the methodologies for evaluation, assumptions used or summarise the quantified costs and benefits.
- 17 The Section 42A Neild and Rhodes Report¹ in my view lacks a concise and clear statement of methodology, assumptions used and the outcomes. The report does not appear to have conducted thorough farm systems analysis and fails to provide a sense of annual production loss, the annual costs for dairy farmers or what impact these costs will have on the profitability and land prices of dairy farmers, or the likely number of farmers leaving the Region due to the impact of complying with Rule 13.1.
- 18 The Report suggests that compliance costs associated with Rule 13.1 for farmers will not be significant, nor will they have major flow-on effects through the regional economy. However, in my view, the Present Value costs estimated at \$170,000 per farm are very significant.
- 19 Fonterra's suggested amendments to Rule 13.1 would improve efficiency with less compliance costs required to achieve the same outcomes. Delaying the start of regulation would allow time for industry and farmers to assess and implement appropriate plans to cost effectively reduce N-loss based on individual circumstances. Conducting a thorough review after five years of industry led initiatives would determine if a regulatory approach such as the POP is required or not and allow for targets to be re-set based on improved information and knowledge.

¹ Section 42A Report "Economic Impacts of Proposed One Plan LUC Nitrogen Leaching/Run-off Values" by Jeremy Neild and Tony Rhodes

- 20 I support Fonterra's proposal to increase the Year 1 limits for some LUC classes, as this will reduce farmers' reliance on grandparenting. Trading N-loss permits needs further consideration and evaluation.

CONTRIBUTION OF DAIRY FARMING TO THE ECONOMY

National economy

- 21 Agriculture is New Zealand's dominant export industry, consistently contributing over 50% of the total value of merchandise exports since the early 1990s. Dairying is the single largest export earning industry in New Zealand. Dairy's contribution to export receipts has remained within the range of 19 to 23% in the years ended 30 June 2000 to 2007.
- 22 Nationally, milk supplied to dairy companies in 2006-07 was valued at \$5.9 billion based on the average dairy company payout of \$4.46/Kg milksolids. However, when the processing, distribution, wholesaling and retailing are considered, the value of the dairy industry is considerably more. This is a significant contribution to the economic prosperity of the country.

Regional economy

- 23 The output from dairying within the Horizons Region was valued at \$416 million in 2006-07 (based on a \$4.46 average dairy company payout). This is equivalent to 7.2% of the farm gate value of national milk production in that year. Of course, the economic value of dairying to the Horizons Region is much greater than \$416 million annually, due to the local businesses it supports and employment it provides.
- 24 Calculating the added value of dairying for the Region is not straightforward. I have been advised by the New Zealand Institute of Economic Research (*NZIER*) that using multipliers to determine the added value of an industry in a region for policy analysis is not sound economic practice. Further, the use of multipliers to support policy analysis proposals is now routinely dismissed by central Government. Geoff Butcher² notes that the multipliers are a coarse measure only and that regional multipliers generally overstate the impact to the regional economy.
- 25 A more robust method of calculating the flow-on effects of dairying within the Region would be to construct a Computable General Equilibrium (*CGE*) model, as this makes allowance for non-marginal impact on resource availability and prices. However, such a model takes a lot of time and resource to complete.

² Page 41 of a Lincoln University research paper "An economic evaluation of changes in the allocation of water for the Ashburton river, Greer.G and Rae.G, 1992

- 26 In the absence of a CGE model for the Horizons Region, I consider that a multiplier of between 1.4 and 2.0 would be appropriate to value dairy processing, distribution, wholesaling and retailing for the Region. These multipliers give a value of between \$580 and \$850 million in 2006-07. On this basis the 1.58 multiplier used in the Neild and Rhodes Report seems reasonable.
- 27 NZIER has estimated that dairy cattle farming contributed 5.0% to Manawatu-Wanganui GDP and a further 2.0% was contributed by meat and dairy processing (in value added terms). This analysis is based on 1995-96 Statistics New Zealand Inter-industry tables, updated using subsequently released 2003 Supply and Use tables, and finally up-scaled to 2007 levels using latest Statistics New Zealand macroeconomic data.
- 28 Dairying in the Horizons Region is estimated³ to employ approximately 1,900 people on-farm and Fonterra alone employs approximately 660 staff in manufacturing, transportation and research.
- 29 In summary, dairying is a significant economic contributor and is therefore important to the economic well-being of the Region. This is recognised in the Section 32 Report for the POP: *"Agriculture, particularly pasture-based farming is the foundation of the Region's economy and is one of the key elements that have defined our social and visual landscape"*⁴.

Projected growth

- 30 Growth of dairying⁵ in the Horizons Region has been modest over the last decade. The number of dairy herds has declined at the rate of 2.5%⁶ per year to 866 herds in 2007-08. Over the 10 year period to 2007-08 the number of cows milked increased 1.2% per year to 287,860, while the amount of effective land for milking cows increased only 0.5% to 105,456 hectares. Total milksolids from the region increased at the rate of 2.5% per year. However, if 2007-08 is excluded due to the drought reducing milk output in that season, the rate of growth was 3.0% per year over the nine year period from 1997-98 to 2006-07. This is faster than the annual milksolids growth for the North Island of 2.4% but less than the growth rate for New Zealand of 4.2% over the same nine years.

³ Based on information for the Lower North Island from "Employment Trends in Dairy Farming in New Zealand 1991-2006, Wilson J and Tipples R, February 2008. Data was used from the 2006 Census and New Zealand Dairy statistics to derive 2.16 people employed per dairy herd.

⁴ Page 45.

⁵ Based on the data presented in the New Zealand Dairy Statistics, produced by LIC

⁶ Least squares growth rate used in this analysis is calculated by fitting a linear regression trend line to the logarithmic annual values

31 Dairy farming (excluding young stock and support land) only occupies 4.8% of land in the Horizons Region, but makes a larger proportional contribution to the economy. The total amount of land in the Horizons Region used for dairy farming grew rapidly through the 1990s, however, this growth dissipated through the 2000s. While suitable land exists in the Region to allow for future growth of dairy farming, growth over the last decade (including 2000-01 and 2001-02 when milk payouts spiked due to favourable exchange rates) has been modest, compared to growth in other regions and compared to the potential land use change. Nonetheless, I do not consider that the growth of dairying in the Region will be constrained by the availability of suitable land.

32 In order to determine the future size of dairying in the Horizons Region, I have analysed three scenarios:

32.1 The first assumed slowing growth with stocking rate and hectares increasing at a diminishing rate over the next 20 years, i.e slower than the rate of growth than the previous decade⁷;

32.2 The second was for continued growth of stocking rate at 0.6% per year and hectares at 0.5% per year, the same rate of growth from 1997-98 to 2007-08; and

32.3 The third was for stocking rate to increase at 0.6% per year but hectares to grow at twice the rate of the last decade (+1.1%).

I chose these scenarios because they provide a realistic range of what could occur. However, the rate of growth and conversion of land to dairying will depend heavily on the milk price, profitability relative to other agricultural land uses, the desire for existing land owners to change to dairy farming, and policies and regulations that may inhibit current and potential dairy farmers.

33 Results are provided in **Tables 1, 2 and 3** respectively. This analysis does not take into consideration any changes resulting from specific regulations and/or restrictions imposed by the POP, ETS or any other policy. It also assumes milk prices will increase at a similar rate to the previous decade.

34 The expected consolidation of small units into larger scale operations, as well as some farms leaving the industry, or becoming

⁷ Hectares increase at an average 0.2%, stocking rate 0.4% and cows 0.7% per year over the forecast period to 2030. This compares with hectares +0.5%, stocking rate +0.6% and cows +1.2% per year in the decade to 2007-08. Milksolids/cow only increases at 0.5% in the forecast period compared with 1.7% in the nine years to 2006-07.

support blocks, will see the projected number of herds to continue to subside. Another assumption used in this analysis for simplicity is that the total number of dairy herds will decline at the rate of 10 herds per year across all 3 scenarios. This is a slower decline than the loss of 25 herds per year over the last decade.

Scenario One – slowing growth

Table 1: Dairying in the Horizons Region – slow growth

Season	Herds	Hectares (000)	Cows (000)	Milksolids (million Kgs)	Cows/herd	MS/herd	MS/ha	MS/cow
1997-98	1,079	95.4	247.0	76.2	229	70,579	798	308
2007-08	866	105.5	287.9	93.8	332	108,313	889	326
2010-11f	831	108.5	302.0	104.5	363	125,740	963	346
2020-21f	731	111.8	329.8	120.7	451	165,112	1,079	366
2030-31f	631	114.0	347.7	134.2	551	212,676	1,177	386

f = forecast

Source: DairyNZ Economic Group, New Zealand Dairy Statistics

- 35 Under this scenario the amount of land milked on in the Region is estimated by the DairyNZ Economics Group to remain reasonably steady to 2030. Further intensification and a subsequent lift in stocking rate is expected in the Horizons Region. The stocking rate is currently 2.73 cows per hectare and this is estimated in this scenario to increase slowly to 3.06 cows per hectare in 2030. The increase in stocking rate and static land area indicate cow numbers increasing from 287,860 in 2007 to 348,000 in 2030, a 20.9% increase.
- 36 I have assumed that milksolids production per cow will increase at a flat rate of 2.0 kilograms per year. This takes per cow production from around 340 kg ms/cow to 386 kg ms/cow by 2030. This results in the average herd size increasing from 350 cows to around 550 cows by 2030, producing 1,177 Kg milksolids per hectare (+27% from current production of 930 kg ms/ha).

Scenario Two – continuing average growth-

Table 2: Dairying in the Horizons Region – annual growth at the same rate as between 1997 and 2007

Season	Herds	Hectares (000)	Cows (000)	Milksolids (million Kgs)	Cows/herd	MS/herd	MS/ha	MS/cow
1997-98	1,079	95.4	247.0	76.2	229	70,579	798	308
2007-08	866	105.5	287.9	93.8	332	108,313	889	326
2010-11f	831	108.7	302.3	105.3	364	126,670	969	348
2020-21f	731	114.8	340.6	134.4	466	183,790	1,171	395
2030-31f	631	121.2	383.7	171.6	608	271,751	1,415	447

f = forecast

Source: DairyNZ Economic Group, LIC Dairy Statistics

- 37 Scenario 2 is based on the assumption that hectares, cows, stocking rate and milksolids/cow will all increase at the same rate as they did from 1997 to 2007. The difference between the results in scenario 1 and 2 is that cows, hectares, stocking rate and milksolids production continue to increase at the same rate throughout the 2020s in Scenario 2, while this growth is reduced in Scenario 1.
- 38 Results from Scenario 2 show the constant 0.5% increase in hectares and similar (0.6%) increase in stocking rate would lift cows milked in the Horizons Region to 384,000 in 2030, a 33.2% increase. This growth in cow numbers coupled with a 1.2% annual increase in milksolids per cow produces a regional output of 172,000 kilograms milksolids (+83%). Production on a per hectare basis would increase from 930 kilograms milksolids to 1,415 (+52%). The average herd size in 2030 would be 608 cows milked on 192 hectares.

Scenario Three – fast growth

Table 3: Dairying in the Horizons Region – annual growth at a faster rate than from 1997 to 2007

Season	Herds	Hectares (000)	Cows (000)	Milksolids (million Kgs)	Cows/herd	MS/herd	MS/ha	MS/cow
1997-98	1,079	95.4	247.0	76.2	229	70,579	798	308
2007-08	866	105.5	287.9	93.8	332	108,313	889	326
2010-11f	831	109.3	304.0	106.6	366	128,296	976	351
2020-21f	731	121.9	361.6	154.6	494	211,473	1,269	428
2030-31f	631	135.9	430.1	224.2	681	355,220	1,650	521

f = forecast

Source: DairyNZ Economic Group, LIC Dairy Statistics

- 39 Scenario 3 is based on the assumption that hectares (+1.1%), cows, and milksolids/cow (+2.0%) will all increase at a faster linear rate than the decade ending 2007-08. This would see cow numbers increase from 288,000 to 430,000 (+49%) and hectares increase 28 per cent from 106,000 to 136,000. Under this scenario cows per herd would climb to 681 on an average 215 hectares while milksolids/hectare increases 77% to 1,650 kilograms.

Conclusions regarding scenarios

- 40 The three scenarios are a sensitivity test of the possible size of dairy industry in the Horizons Region to 2030. The key results are displayed graphically in **Figures 1-3**.

Figure 1: Cows milked in Horizons Region

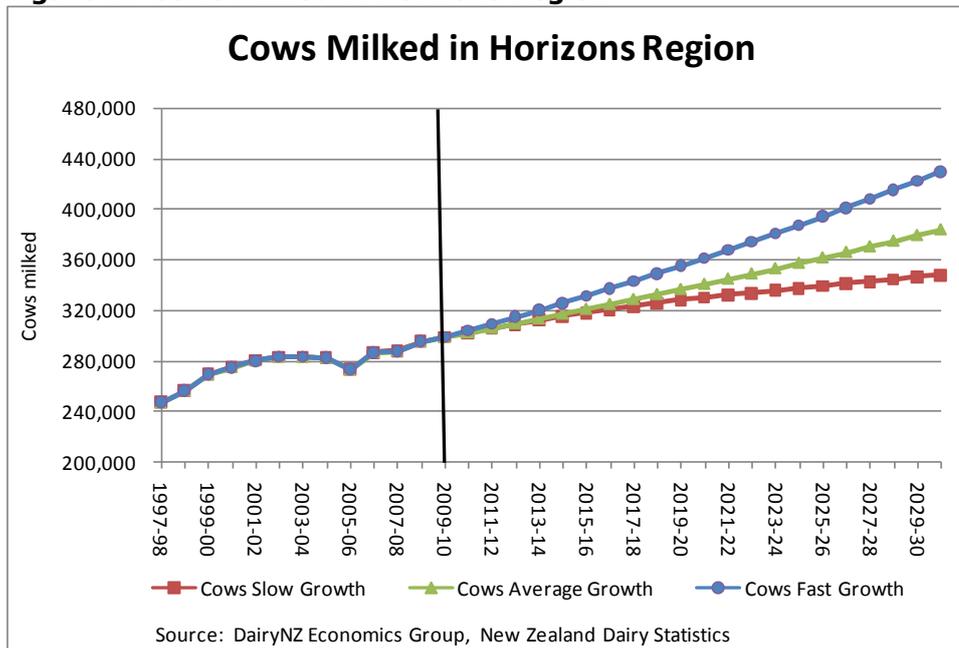


Figure 2: Effective Dairy Hectares in Horizons Region

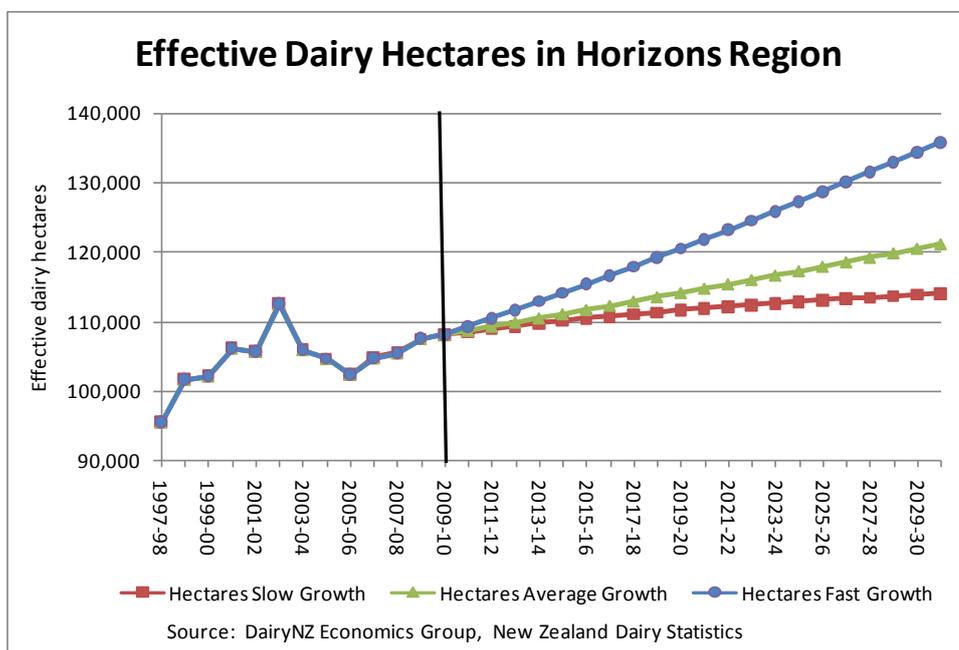
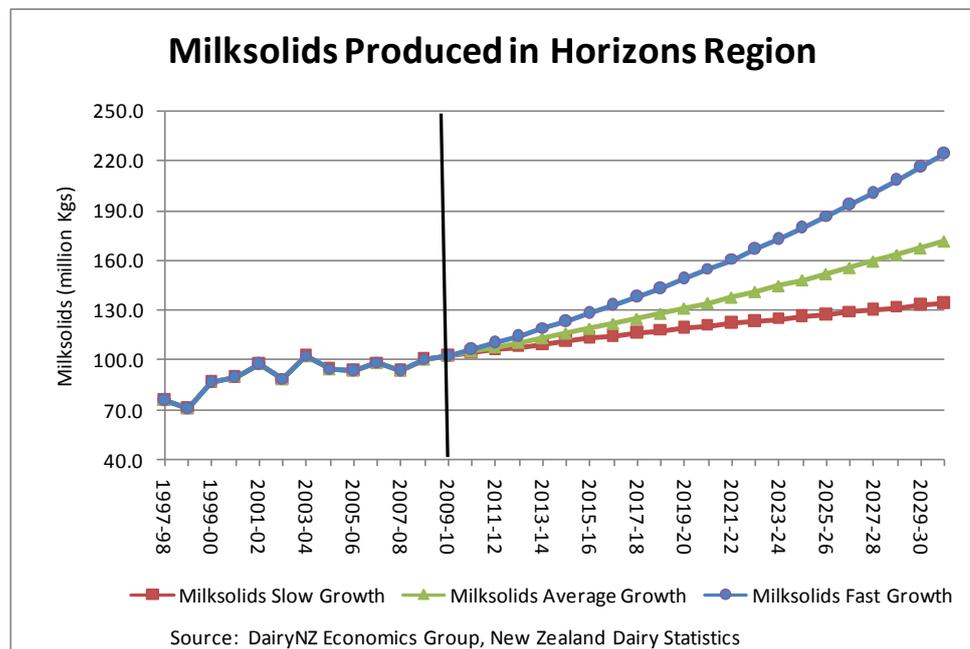


Figure 3: Milksolids Produced in Horizons Region

- 41 It is my opinion that growth at the same rate as the previous decade (scenario 2) is a more likely outcome than the fast growth rate (scenario 3). Given the increasing environmental pressure and other regulations and restrictions on resource use, growth could be slower, particularly in the 2020s (scenario 1).
- 42 Based on the above analysis I have concluded that dairying's contribution to the regional economy will be similar to the current position. This is based on the assumption the rest of the regional economy will grow at a similar rate to the growth of dairying. I expect pastoral farming to continue to be the backbone of the Horizons regional economy for at least the next 20 years and for the dairy industry to increase in size.

NEED FOR COST BENEFIT ANALYSIS

- 43 In preparing this evidence, I considered the Section 42A Report entitled "Economic Impacts of Proposed One Plan LUC Nitrogen Leaching/Run-off Values" by Jeremy Neild and Tony Rhodes. The purpose of this Report was to estimate the economic impacts of implementing Rule 13.1 of the POP. However, a comprehensive Cost Benefit Analysis (CBA) is required in the first instance and would have provided more insight into all the costs and benefits of implementing the POP. At this stage it is unclear whether Rule 13.1 of the POP produces net benefits or not, and if so, what the values of those benefits are. The study claims to have no market value of expected environmental benefits. However, I consider it essential

that benefits are thoroughly evaluated, in order to determine whether they outweigh the costs of regulation.

- 44 The Neild and Rhodes Report provides an insight into dairying in the Region, a case study of 20 farms⁸ and the impacts of the POP on them, a methodology for evaluating the costs of achieving compliance, and the current size of the industry in the Region. However, in my view it lacks a concise and clear statement of what has been done, assumptions used, and the outcomes.
- 45 While the number of case study farms analysed was small, the Report does state⁹ they were chosen to test particular situations, rather than being a random sample of farms. The impact of POP for individual farms varies significantly depending on the farms starting position and options available for reducing N loss. To make assumptions about the potential impacts of POP on dairy farms based on only 20 farms from the 460 farms in the Water Management Zones could be misleading.
- 46 The Report provides no sense of the production loss, the annual costs for dairy farmers or what impact those costs will have on production, the profitability of dairy farmers, or the number of farmers likely to leave the Region due to the impact of complying with Rule 13.1. Analysis in the Report does not appear to have conducted any farms systems modelling, which would be useful to help understand the physical and financial impact of complying with Rule 13.1. The report does highlight each farm is different and will require specific customised plans to reduce N loss.
- 47 The Report does not provide a strong conclusion but tends to suggest¹⁰ that compliance costs associated with Rule 13.1 for farmers will not be significant, nor will they have major flow-on effects through the Regional economy¹¹. However, in my view, the analysis does not support this. Neild and Rhodes estimate that the Present Value (PV) Costs at 6.5% discount rate are \$170,000 per farm or \$192,000 per farm when the POP is combined with the Clean Streams Accord and current resource consent compliance. This is a very significant cost for farmers.
- 48 Horizons is required by section 32 of the Resource Management Act 1991 to make an evaluation of the appropriateness of the objectives, policies and methods proposed. The evaluation of the policies and methods must take into account the costs and benefits and risks of acting or not acting. The Horizons POP Section 32

⁸ As presented in Figure one, page 6 of the Report

⁹ Page 12

¹⁰ Page 29

¹¹ Page 59

analysis only gives an indication (high versus low) of costs and benefits of components of POP compared to a do nothing option. It is unclear if alternatives to Rule 13.1, such as industry initiatives to achieve agreed targets, were considered in this evaluation. The section 32 Report does not provide any insight into the methodologies for evaluation, assumptions used, or the quantified costs and benefits for comparisons.

- 49 A comprehensive CBA taking into consideration administration costs, on-going surveillance and enforcement costs, costs of compliance for farmers and other consent holders, impacts on agricultural production and profitability, the impact of Rule 13.1 on land prices in the Region, as well as fully quantifying the benefits, is required in order to fully evaluate the Rule 13-1 proposal.
- 50 The Ministry of Economic Development provides guidelines for economic principles relating to regulatory and policy practices¹². The key principles to consider with the POP are efficiency and equity.
- 51 The Code of Good Regulatory Practice provides that efficiency requires regulatory bodies to: *"adopt and maintain only regulations for which the costs on society are justified by the benefits to society, and that objectives should be achieved at lowest cost, taking into account alternative approaches to regulation"*. This implies a comprehensive CBA is required and that the benefits must outweigh the costs. It also requires that Rule 13.1 is the most cost effective way to achieve the outcomes. In my opinion, Horizons has not demonstrated that Rule 13.1 meets either of these tests.
- 52 In order to determine that the POP rules are the most efficient method of achieving Horizons' objectives, alternative approaches such as the Clean Streams Accord need to be considered and evaluated. When government intervention is desirable, regulatory measures should be the minimum required to achieve the outcomes sought. I have not seen any evidence to support the view that Rule 13.1 uses minimum regulation to achieve Horizon's objectives.
- 53 Compliance costs imposed on society and individuals should be fair (equitable) and reasonable. Each waterway should be valued in accordance with their particular multiple uses which will require different levels of water quality. I understand that the evidence of Dr Scarsbrook is that there has not been a robust analysis of those who cause water quality problems, and those who benefit from improved water quality. Without this analysis, it would be inequitable to force dairy farmers (and other intensive land users identified in Rule 13.1) to bear all the costs of water quality

¹² Code of Good Regulatory Practice

improvements, and the regulation Horizons has chosen to achieve this.

- 54 The costs and time involved in preparing a Farmer Applied Resource Management (*FARM*) Strategy for each of the 460 dairy farms in the Water Management Zones (*WMZs*) is excessive to achieve the objectives. Each individual farm will face different costs associated with reducing N-loss through the POP, that is inequitable from a regulatory point of view.
- 55 Based on the above statements it is my opinion that POP does not inform efficiency, lacks clarity and leads to reduced equity for farmers. Horizons Regional Council has failed to follow good regulatory practice.

FONTERRA'S SUGGESTED AMENDMENTS TO RULE 13-1

- 56 Fonterra's suggested amendments to Rule 13-1 (and consequential amendments to other provisions within chapters 6 and 13) are described in the evidence of Sean Newland and Gerard Willis. While I have not carried out a comprehensive CBA of Fonterra's suggested approach to N-loss management, I have the following comments to make in relation to its apparent impact on costs and benefits.
- 57 A longer lead time before land use activities within WMZs are regulated is essential for allowing land users to consider and implement effective management plans to improve on-farm environmental performance. It would also give time for industries to develop and deliver effective education and appropriate resources/tools to assist farmers achieve targets.
- 58 Consideration needs to be given to the changes farmers face to operations under the POP, given they have not had N-loss constraints imposed in the past. N-loss from farming activities is not new, with losses occurring over more than a century. It is unreasonable to expect farmers to change operations over a short period of time, particularly where the costs are high and will significantly impact on profitability and in some cases the viability of businesses.
- 59 Taking a transitional approach as discussed in the evidence of Gerard Willis will in the long term reduce costs to farmers and allow for a more effective approach to reducing N-loss. Conducting a thorough review after five years of industry led initiatives would determine if a regulatory approach such as the POP is required or not and allow for targets to be re-set based on improved information and knowledge.
- 60 Allowing farms that demonstrate they are within the N-loss limits to be permitted activities will reduce compliance costs, with less

administration required. This would improve efficiency by removing unnecessary regulation. The Code of Good Regulatory Practice¹³ states *"when government intervention is desirable, regulatory measures should be the minimum required, and least distorted, in achieving desired outcomes"*.

- 61 Grandparenting of N-loss limits for those affected land users unable to meet the limits is recommended by Fonterra. This is one way to ensure the penalties of not meeting requirements are not terminal for the business. However, if there is a high proportion of farmers requiring grandparenting it would suggest the targets are too tough and either the time period and/or the targets are not appropriate. Grandparenting is a result of inefficient regulation and it is better to be more efficient in the first place. I support Fonterra's proposal to increase the Year 1 limits for some LUC classes, as this will reduce farmers' reliance on grandparenting.
- 62 Given I am unclear of the extent of the benefits of the POP on water quality in various WMZs or exactly how many farms might meet the targets by year 10 it is difficult to determine the impact that grandparenting might have. However, the impact of reducing the required targets over the first 10 years would be a reduction in operating costs incurred by farmers.
- 63 Trading of permits for activities can be an effective way of distributing undesirable outcomes, as it allows those who cannot meet targets the right to pay for extra emissions and for those with surplus permits to sell. This is important in allowing for improved flexibility of activities while not impacting on the objective. However, unlike Greenhouse gases, N-leaching impacts on water quality which is confined to a particular or series of waterways. In this regard the trading of N loss permits will need to be contained to specific WMZs to avoid the transfer of waste to other catchments.
- 64 By restricting the trading of N-loss permits to within WMZs the market and ability to trade is confined. The costs of setting up and administering the trading of permits may well outweigh the benefits, although these should be quantified to allow for an informed decision.
- 65 In summary, Fonterra's suggested amendments to Rule 13.1 would improve efficiency with less compliance costs and greater fairness for land users by delaying the start of regulation, increasing the Year 1 N-loss limits for some LUC classes, and allowing for grandparenting.

¹³ Ministry of Economic Development

CONCLUSIONS

- 66 Dairy farming in the Horizons Region is a significant contributor to the regional economy and employment. I expect that dairying in this Region will grow over the next 10 to 20 years, but at a rate no faster than the previous decade. The reasons for this expectation include the costs of establishing new dairy farms, rising environmental awareness leading to likely future resource use constraints and/or higher costs for meeting environmental targets, and the relative profitability of sector farming remaining similar to the past decade. In this regard it is likely POP will constrain growth of the dairy industry which will ultimately impact on the economic growth for not only individual farmers but the entire Regional economy.
- 67 The Reports commissioned by Horizons fail to inform efficiency in terms of resource use, compliance costs for farmers, as well as administrative and enforcement costs. By not assessing the full benefits and costs and alternatives to reducing nutrient loss, Horizons has failed to follow good regulatory practice.
- 68 A full CBA of the Rule 13-1 approach and its impact is required to determine if there are net benefits, particularly in relation to the control of nutrient loss.
- 69 Fonterra's suggested amendments to Rule 13.1 are an improvement on Horizons proposal. In particular a delayed start to regulation and a thorough review after year 5 are critical to the success of achieving the objectives of reducing nutrient loss, and improving waterways.

Matthew Newman
30 October 2009.