

**BEFORE THE HEARING COMMISSIONERS
AT HAMILTON**

IN THE MATTER of the Resource Management Act 1991
(**"the Act"**)

AND

IN THE MATTER of the hearing of submissions on The
Proposed Waikato Regional Plan Change 1 –
Waikato and Waipa River Catchments: Block
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**STATEMENT OF REBUTTAL EVIDENCE BY MICHELLE KATHLEEN
SANDS FOR HORTICULTURE NEW ZEALAND**

10 MAY 2019

QUALIFICATIONS AND EXPERIENCE

1. My full name is Michelle Kathleen Sands. I have the qualifications and experience set out in my evidence in chief.

PURPOSE AND SCOPE OF REBUTTAL EVIDENCE

2. In this rebuttal evidence I refer to the evidence of Alison Dewes for Beef + Land New Zealand Limited (**B+LNZ**) and James Reeves and Amy Taylor for themselves (**Mr Reeves**).

JAMES REEVES

3. Mr Reeves is concerned about the different treatment for commercial vegetable production via Policy 3 of PC1 (paragraph [39]). He assumes this is because it is deemed to be a regionally/nationally significant industry.
4. As noted in my evidence in chief it is not just the regional and national significance of commercial vegetable production that warrants a different treatment but also because of the effects profile that the activity has.
5. As outlined in the evidence of Gillian Holmes, the contribution of nitrogen load from vegetable growing is less than 3% of the total nitrogen load in the catchment, and the contribution of *E. Coli* is negligible. Andrew Barber's evidence notes that with good management practice, the erosion rates from land cultivated for vegetable production can be reduced to less than 0.5t/ha/yr, which is comparable to rates of erosion from hill country pasture.
6. The PC1 proposal to reduce nitrogen leaching by 10% from existing vegetable growing is modelled to result in reduced yields¹ and the proposed non-complying rule would restrict new growing areas needed to replace land lost to urban and to feed a growing population. Both of these policies will result in a reduced supply of fresh affordable vegetables for domestic supply.
7. I now turn to consider Ms Dewes evidence as she answers some of the questions posed by Mr Reeves from the perspective of the beef and lamb industry. At a high level her comments are equally applicable to the commercial vegetable production sector.

¹ Agribusiness Group 2014 Nutrient Performance and Financial Analysis of Lower Waikato Horticulture Growers

ALISION DEWES

8. Ms Dewes sets out (paragraphs [63] to [70]) how the intensification of dairy farming in NZ and Waikato has increased in the past 15 years, while the water quality has declined, and at the same time low intensity farm systems have more than halved.

63 A gradual trend of intensification on milking platforms has been observed over the past 2-3 decades. The figure below indicates that most of the dairy farms have doubled output per hectare in the past two decades. Going from an average of 650 kg MS per ha, to 1100 kg MS per ha, with more cows, more feed, more water and more fertiliser, there has also been a gradual upward trend in the environmental footprint – as supported by Figure 1

69 The footprint of dairy has been compounded by intensification over the past 15 years. This has compounded the risk profile of businesses as in Figure 3.

70 As can be seen in Figure 3, low intensity farm systems have more than halved in number, while high intensity farm systems have more than doubled in 15 years

9. Similar to low intensity farming, the area in vegetable growing in the Waikato Region has reduced by 40% between 2002 to 2017². The reduction in area and small contribution of commercial vegetable growing to the water quality in the region, highlights that policy focused at curtailing commercial vegetable growing is mis-directed.
10. The approach for managing the effects from vegetable growing, as set out in the evidence and submission of HortNZ, will achieve both the opportunity for limited growth in commercial vegetable production while not undermining the long-term goal of restoring the ecological health of the catchment. This will be discussed in further detail in Block 3 hearings.

Michelle Sands
10 May 2019

² Statistic NZ Agricultural production census 2002 and 20