

**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 STUART JOHN FORD  
FOR HORTICULTURE NEW ZEALAND**

**10 MAY 2019**

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## QUALIFICATIONS AND EXPERIENCE

1. My full name is Stuart John Ford. I have the qualifications and experience set out in my evidence in chief and I reiterate my compliance with the Code of Conduct.

## PURPOSE AND SCOPE OF REBUTTAL EVIDENCE

2. In this rebuttal evidence I refer to the evidence of Hamish Lowe for Waikato Tainui in relation to OVERSEER® Model. I also refer to the evidence of Frank Scrimgeour for the Waikato District Council (**WDC**) in relation to guideline values.

## HAMISH LOWE

3. In his evidence at paragraph [11] Mr Lowe says:

*OVERSEER® Nutrient Budgets (OVERSEER®) is now widely used and accepted in the RMA context and there is now a very well-considered view on the limitations and usability of OVERSEER®. However, when new farming systems not anticipated by OVERSEER® are used, or the farming system is either a higher or lower end farming system (i.e. high or low nutrient loss system), the modelled result may be less accurate.*

4. And at paragraph [51] he states:

*Notwithstanding my comments above regarding OVERSEER®, the proposed rules do not limit nutrient loss assessments to solely using the OVERSEER® model. For example Rules 3.11.5.2A(6) and 3.11.5.3(5a) allow ‘...any other software or system...’ to be used. This approach is supported for the reasons discussed below.*

5. Although I support Mr Lowe’s conclusion in paragraph [51] I would note that in the remaining discussion he concentrates on the low nutrient loss systems and does not consider the high nutrient loss systems. As I concluded in my evidence in chief at paragraph [55]:

*There still remains a high degree of uncertainty as to the results produced by Overseer in the Commercial Vegetable Production (CVP) sector.*

6. And that is why I offered the opinion (paragraphs [51] and [52]) that:

*[52] As previously discussed in this evidence Overseer would not be the decision support tool of choice for at least the CVP sector. This is for a number of reasons including the lack of accurate information produced and because it*

*causes the emphasis to be placed on N when there are four contaminants that must be considered.*

7. It is my opinion that Plan Change 1 would be better served by adopting a definition of the factors that should be considered in choosing an appropriate decision support tool like those proposed in HortNZ's submission than specifying that it should be a particular tool.
8. While I agree with the general thrust of Mr Lowe's evidence, I cannot agree that it is the low nutrient systems where the inaccuracies occur as that is also the case in the CVP sector.

#### **FRANK SCRIMGEOUR**

9. In his Evidence in Chief Dr Scrimgeour states at paragraph [3.7] that:

*Waikato DC's submission questioned the use of Overseer methodology being 100% fit for purpose, particularly for vegetable production. Reporting Officers have responded to the matter (raised by many) with an acknowledgement that a WRC Nitrogen Reference Point Guideline is needed, specifying specific scientific work-arounds and proxies to allow Overseer to be used in a more accurate manner. Schedule B(d) within the 'Tracked Changes' Recommendations incorporate such a guideline. This inclusion is seen as appropriate, and to an extent reflects changes sought in the Waikato DC submission.*

10. From a HortNZ perspective the proposed changes are not seen as an appropriate means to ensure that OVERSEER® can be used in a more accurate manner. In my evidence at paragraphs [22] to [40] I point out the reasons why I do not consider OVERSEER® as an appropriate decision support tool for use in the CVP sector. I then go on to discuss APSIM as an appropriate decision support tool and then conclude that:
11. It is my opinion that PC 1 would be better served by adopting a definition of the factors that should be considered in choosing an appropriate decision support tool like those proposed in HortNZ's submission than specifying that it should be a particular tool.
12. While it is Dr Scrimgeour's opinion that the proposed changes may meet the changes sought by the Waikato DC submission, in my opinion they do not meet the needs of the HortNZ sector to allow for accurate estimation of the N leaching from the CVP properties.

**Stuart John Ford**  
**10 May 2019**