IN THE MATTER OF The Resource Management Act

1991

AND

**IN THE MATTER OF** Proposed Plan Change 7 to the

Canterbury Land and Water

Regional Plan

# SUPPLEMENTARY EVIDENCE OF SUSAN CLARE RUSTON

## FOR THE WAIMAKARIRI NEXT GENERATION FARMERS TRUST

**25 NOVEMBER 2020** 

#### 1. INTRODUCTION

- 1.1. My full name is Susan Clare Ruston. I have previously provided planning evidence for the Waimakariri Next Generation Farmers Trust (NGFT or the Trust) dated the 17<sup>th</sup> of July 2020 with respect to Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan (PC7).
- 1.2. During the hearing commencing 10am on the 19<sup>th</sup> of November 2020 I responded to questions from the Commissioners with respect to my evidence in chief, and I offered to respond to some of the questions through supplementary evidence. These questions related to the NGFT's submission seeking that "a new policy and method be inserted that commits Canterbury Regional Council to work with farmers, primary sector groups and other stakeholders, in the design and implementation of a water quality monitoring programme, and in the analysis of the results obtained"<sup>1</sup>, and their relief sought with respect to nitrogen loss reductions.
- 1.3. During the same hearing, I informed the Commissioners of 'rounding errors' in Table 1 on page 21 of my evidence in chief and offered to provide the Commissioners with a corrected table through supplementary evidence.
- 1.4. This supplementary evidence addresses these matters in turn.

#### 2. NGFT'S PROPOSED NEW POLICY

- 2.1. I understand that the NGFT's primary concern with PC7 focuses on Table 8-9 which requires progressive reductions in nitrogen losses within a defined Nitrate Priority Area. Table 8-9 sets 10-yearly percentage reductions in nitrogen loss for five Nitrate Priority Sub-areas, with the percentage reductions ceasing at different stages for each Sub-area and the last reduction is set at 1 January 2080.
- 2.2. The NGFT has accepted the targeted reductions in Table 8-9 for 2030 and 2040, and has sought that any further reductions that may be needed at 2050 and

<sup>&</sup>lt;sup>1</sup> Submission of the Waimakariri Next Generation Farmers Trust, dated the 13<sup>th</sup> of September 2019, Paragraph 19.

beyond are set through future plan changes and are informed by robust data collected over the interim years.

- 2.3. The Trust's submission notes their commitment to "ensuring that planning decisions are founded on sound information" and to "involving those who will be impacted by the planning requirements in the collection and analysis of the information".<sup>2</sup> The Trust is committed to the development and implementation of a "stronger water quality monitoring and data analysis programme to inform the next phase of nitrogen loss reduction targets".3 With this, they note that farmers have bores and surface water sampling sites that farmers can monitor; and that this data could be combined with Canterbury Regional Council's data to provide a more robust knowledge base on which to set any potential further nitrogen loss reductions. On this basis, the Trust has sought a stronger partnership between Canterbury Regional Council and landowners in the design and implementation of a water quality monitoring programme. The Trust has moved from seeking a new policy and method in PC7 to form such a partnership (as identified in their submission), to seeking a non-regulatory commitment from the regional council, and I understand that they will address this matter with the council directly.
- 2.4. In my opinion, this is a helpful shift in approach; and I agree with the thoughts offered by Commissioner van Voorthuysen and Commissioner Sheppard during the hearing, that a policy in a regional plan should not commit a regional council, or future regional councils, to undertake an action such as 'partnering with stakeholders'.

#### 3. AMENDMENT TO POLICY 8.4.25

3.1. As suggested by Commissioner van Voorthuysen during the hearing, I have considered whether Policy 8.4.25 of PC7 could be amended to reflect the submissions of the NGFT, in particular those matters set out in paragraph 11

<sup>2</sup> Submission of the Waimakariri Next Generation Farmers Trust, dated the 13th of September 2019, Paragraph 17

<sup>&</sup>lt;sup>3</sup> Submission of the Waimakariri Next Generation Farmers Trust, dated the 13th of September 2019, Paragraph 18

of Mr Mark Christensen's legal submissions for the Trust. Those matters include acceptance of nitrogen loss reductions in 2030 and 2040 while also being clear that additional reductions may be needed beyond 2040, and that the nature and scale of such reductions will be determined through monitoring between now and later plan changes.

- 3.2. To achieve this, I recommend the following amendments to Policy 8.4.25 and the addition of a new explanatory note immediately following Policy 8.4.25. In my opinion, the proposed amendments better align Policy 8.4.25 with the regulatory requirements identified in my evidence in chief.
- 3.3. In drafting these amendments, I have used the s42A Report Appendix E recommendations where the officers' recommended changes are shown in red; and my recommendations are shown in blue.

### Policy 8.4.25

Nitrate-nitrogen limits targets for the Waimakariri Sub-region are achieved, and risks of degraded water quality in potential future impacts on the nitrate-nitrogen concentrations of waterbodies outside the Waimakariri Sub-region are managed by:

- a. <u>further restricting, relative to the region-wide rules, the area of land</u>
  <u>used for a farming activity as a permitted activity, and the area of winter</u>
  <u>grazing that may occur as a permitted activity; and</u>
- prequiring, within the Nitrate Priority Area, further reductions in nitrogen loss from farming activities (including farming activities managed by an irrigation scheme or principal water supplier) in accordance with Table 8-9, provided that any further stage of reduction required is greater than 3 kg of nitrogen per hectare per year for dairy, or 1 kg of nitrogen per hectare per year for all other farming activities. and no reductions in nitrogen loss are required where the nitrogen loss from farming activities is at or below 20 kg of nitrogen per hectare per year.

## Note:

Section 79 of the Resource Management Act 1991 requires that regional councils commence a review of a provision in a regional plan at least once every 10 years. Accordingly, if ongoing monitoring indicates that the water quality targets set in Tables 8-5 to 8-8 of this plan, and in the National Policy Statement for Freshwater Management 2020, will not be met following the 2040 reductions in nitrogen loss, then further reductions in nitrogen loss are likely to be required in future plan changes.

Table 8-9: Nitrate Priority Area Staged Reductions in Nitrogen Loss for Farming Activities, Farming Enterprises and Irrigation Schemes

Nitrate Priority	Farming Type	<u>Cumulative</u> percentage reductions in nitrogen loss and dates by which these are to be achieved						
Sub-area (see Planning Maps)		By 1 January 2030	By 1 January 2040	By 1 January 2050	By 1 January 2060	By 1 January 2070	By 1 January 2080	
Sub-area A	<u>Dairy</u>	<u>15%</u>	30%					
	All other	<u>5%</u>	<u>10%</u>					
Sub-area B	<del>Dairy</del>	<del>15%</del>	<del>30%</del>	<u>45%</u>				
	<u>All other</u>	<del>5%</del>	<del>10%</del>	<del>15%</del>				
<del>Sub-area C</del>	<del>Dairy</del>	<del>15%</del>	<u>30%</u>	<u>45%</u>	<u>60%</u>			
	All other	<del>5%</del>	<del>10%</del>	<del>15%</del>	<del>20%</del>			
<del>Sub-area D</del>	<u>Dairy</u>	<u>15%</u>	<del>30%</del>	<u>45%</u>	<del>60%</del>	<del>75%</del>		
	<u>All-other</u>	<del>5%</del>	<del>10%</del>	<del>15%</del>	<del>20%</del>	<del>25%</del>		
Sub-area E	<u>Dairy</u>	<del>15%</del>	<u>30%</u>	<u>45%</u>	<u>60%</u>	<del>75%</del>	<del>90%</del>	
	All other	<del>5%</del>	<del>10%</del>	<del>15%</del>	<del>20%</del>	<del>25%</del>	<del>30%</del>	

<sup>1.</sup> The starting point for applying each percentage reduction in nitrogen loss in Table 8-9 is generally the Baseline GMP Loss Rate except as otherwise provided for in Policy 8.4.26 for individual farming activities and farming enterprises, and in Policy 8.4.29 for irrigation schemes

## 4. TABLE 1 – HYPOTHEICAL EXAMPLE OF ZIPA APPROACH VS PC7 APPROACH

4.1. During the hearing on the 19<sup>th</sup> of November 2020 I advised the Commissioners that there were some 'rounding errors' in Table 1 on page 21 of my evidence in chief. These errors in no way impact the evaluation and conclusions provided in my evidence in chief. However, the relationship being illustrated by Table 1 is clearer without the errors present. Accordingly, Annexure 1 of this supplementary evidence provides a corrected version of Table 1. With this, an additional column has been added to Table 1 to better illustrate the

<sup>2.</sup> For the purposes of applying the nitrogen reductions in Table 8-9, 'Dairy' farming does not include 'Dairy Support' activities. 'Dairy Support' is classified under 'All other' farming activities.

<sup>3</sup> The percentage reductions required by Table 8-9 are only to be applied to farming activities that require resource consent for farming land use and where the required reduction for each stage is greater than 3 kg nitrogen per hectare for dairy, and 1 kg per hectare for all other farming activities the nitrogen loss is 20 kg of nitrogen per hectare per year or greater. no reductions in nitrogen loss are required where the nitrogen loss from farming activities is at or below 20 kg of nitrogen per hectare per year.

different precent reductions in N loss from the preceding 10-year period for both the PC7 and ZIPA approaches.

Susan Ruston

25<sup>th</sup> of November 2020

## Annexure 1. Corrected Table 1 of the Evidence in Chief of Susan Ruston

Table 1 – Hypothetical Example of ZIPA Approach vs PC7 Approach

	Allowable N loss, kgN/ha/yr	Reduction in N loss over preceding 10 years, kgN/ha/yr	% reduction from previous 10-year N loss allowance
ZIPA approach to nitrogen loss reductions			
Farm Baseline GMP N loss	50		
15% reduction from Baseline GMP N loss by 2030	42.5	7.5	15
15% reduction from 2030 nitrogen loss number by 2040	36.1	6.4	15
15% reduction from 2040 nitrogen loss number by 2050	30.7	5.4	15
15% reduction from 2050 nitrogen loss number by 2060	26.1	4.6	15
15% reduction from 2060 nitrogen loss number by 2070	22.2	3.9	15
15% reduction from 2070 nitrogen loss number by 2080	18.9*	3.3	15
PC7 Table 8-9, Cumulative application of % reductions			
Farm Baseline GMP N loss	50		
15% reduction from Baseline GMP N loss by 2030	42.5	7.5	15
30% reduction from Baseline GMP N loss by 2040	35.0	7.5	18
45% reduction from Baseline GMP N loss by 2050	27.5	7.5	21
60% reduction from Baseline GMP N loss by 2060	20.0	7.5	27
75% reduction from Baseline GMP N loss by 2070	12.5*	7.5	38
90% reduction from Baseline GMP N loss by 2080	5.0*	7.5	60