

**From:** [Carmen Taylor](#)  
**To:** [Plan Hearings](#)  
**Cc:** [Anna Wilkes](#); [Ants Roberts](#); [Stephen Christensen \(stephen@projectbarrister.nz\)](#)  
**Subject:** PC7 to the LWRP / PC2 to the WRRP - Ravensdown's Hearing Evidence (Submitter ID. 114 for PC7 / Submitter ID. 9 for PC2)  
**Date:** Friday, 17 July 2020 11:33:32 am  
**Attachments:** [Ravensdown Sub ID 114 and 9 LWRP PC7 and WRRP PC2 Hearing Ms Wilkes Evidence FINAL 170720.pdf](#)  
[Ravensdown Sub ID 114 and 9 LWRP PC7 and WRRP PC2 Hearing Dr Roberts Evidence FINAL 170720.pdf](#)  
[Ravensdown Sub ID 114 and 9 LWRP PC7 and WRRP PC2 Hearing Ms Taylor Planning Evidence FINAL 170720.pdf](#)

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Hi

Please find attached Ravensdown's evidence for the above hearing.

If have any questions or wish to clarify any matter, please do not hesitate to contact me.

Regards, Carmen



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**IN THE MATTER**

of the Resource Management Act 1991

**AND**

**IN THE MATTER**

of the Proposed Plan Change 7 to the Canterbury  
Land and Water Regional Plan

**AND**

**IN THE MATTER**

of the Proposed Plan Change 2 to the Waimakariri  
River Regional Plan

**AND**

**IN THE MATTER**

of submissions by Ravensdown Limited  
(Submitter ID. 114 for PC7 / Submitter ID. 9 for  
PC2)

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**STATEMENT OF EVIDENCE OF ANNA MARY WILKES**

**ON BEHALF OF RAVENSDOWN LIMITED**

**17 JULY 2020**

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## SUMMARY

- A. Ravensdown Limited (**Ravensdown**) is a farmer-owned co-operative with over 4,000 shareholders based in Canterbury. Ravensdown is a science-focused organisation delivering quality agri-products, technologies and services, and is an integral part of the food creation process, whether the food is grown for livestock or for humans.
- B. Ravensdown recognises the need for the environmental impacts of farming to be mitigated and is supportive of an effects-based approach. However, it is important that farmers' ability to operate is protected and they retain the opportunity to innovate and to run farm businesses that are productive, sustainable and profitable.
- C. While some of Ravensdown's submissions have been addressed through the section 42A Report's recommendations for amendments to Proposed Plan Change 7 (**PC7**) to the Canterbury Land and Water Regional Plan (**LWRP**) and Proposed Plan Change 2 (**PC2**) to the Waimakariri River Regional Plan (**WRRP**), a number of matters require further consideration and amendment.
- D. Ravensdown is concerned that the issue relating to flawed fertiliser and irrigation proxies in the Farm Portal remains, despite significant efforts and recommendations by the GMP Implementation Working Group, established following Proposed Plan Change 5 to the LWRP being made operative. This results in the Farm Portal generating potentially erroneous GMP loss rates which farmers are then bound to through farming land use consents.
- E. Ravensdown would like to see an amendment to the proposed reductions in N losses for industrial activities in the High Nitrogen Concentration Areas in the Orari-Temuka-Opihi-Pareroa sub-region to 30% reductions, where this is achievable, from current consent limits, rather than an absolute maximum of 30%. This provides the Council with some flexibility to better recognise relative contributions of contaminants from industrial activities.

## **1. INTRODUCTION**

- 1.1 My full name is Anna Mary Wilkes
- 1.2 I am employed by Ravensdown Limited (**Ravensdown**) as Environmental & Policy Manager. I have worked in this role since February 2020 and for three years prior I was the Environmental Policy Specialist.
- 1.3 Prior to joining Ravensdown, I was employed by Golder Associates Limited (and its predecessor Kingett Mitchell Limited) in various environmental consulting roles between 2005 and 2017.
- 1.4 I have a Bachelor of Science in Microbiology (1997) and a Master of Science with Honours in Biochemistry (2000) from the University of Canterbury. I also have a Master of Resource and Environmental Planning with Honours (2018) from Massey University.
- 1.5 I am an Associate Member of the New Zealand Planning Institute and a member of the Resource Management Law Association.
- 1.6 I am presenting evidence as a representative of Ravensdown, and not as an expert witness.

## **2. SCOPE OF EVIDENCE**

- 2.1 In preparing my evidence, I have reviewed the following documents:
  - (a) Proposed Plan Change 7 (**PC7**) to the Canterbury Land and Water Regional Plan (**LWRP**) and Proposed Plan Change 2 (**PC2**) to the Waimakariri River Regional Plan (**WRRP**);
  - (b) The section 42A Report for PC7 and PC2 dated March 2020 and the 29 April 2020 errata;
  - (c) Relevant aspects of a number of the 'Council Documents' made available on the Hearings web page for PC7; and
  - (d) The evidence prepared by Dr Ants Roberts, Ravensdown's Chief Scientific Officer, and Ms Carmen Taylor, a planning consultant with Planz Consultants Limited.
- 2.2 The scope of my evidence is to provide contextual background to Ravensdown's interest in PC7, and to address some specific functionality issues prior to Dr Roberts addressing matters pertaining to OVERSEER and Ms Taylor addressing specific planning matters in her evidence.
- 2.3 I note that my evidence does not specifically address any matters arising from PC2. As I understand the situation, and as discussed in Ms Taylor's evidence, PC2 aims to ensure that any potential inconsistencies between the WRRP and the Waimakariri sub-region of the LWRP are removed from the WRRP.
- 2.4 In **Section 3** of my evidence, I provide an overview on Ravensdown's general interest in regulatory processes and the construct of the business as a farmer-owned co-

operative. In **Section 4** of my evidence, I discuss two specific matters arising from PC7, namely, concerns with flawed proxies in the Farm Portal and proposed reductions in nitrogen losses for industrial activities in the Levels Plain High Nitrogen Concentration Area (**HNCA**).

### **3. RAVENSDOWN LIMITED**

#### **Ravensdown's Interest in Regulatory Processes**

- 3.1 Ravensdown takes an interest in a wide range of resource management matters that relate to rural and industrial activities and participates in planning processes at the national and regional level through preparing submissions on regulatory, policy and plan mechanisms prepared under the Resource Management Act 1991 (**RMA**).
- 3.2 In participating in policy and regulatory development processes, Ravensdown recognises the need for the environmental impacts of farming to be mitigated and is supportive of an effects-based approach. However, given the importance to New Zealand of its farming sector, it is important that farmers' ability to operate is protected and they retain the opportunity to innovate and to run farm businesses that are productive, sustainable and profitable.
- 3.3 In addition, Ravensdown has its own manufacturing, quarrying and bulk fertiliser store activities to service its customers. Ravensdown supports the need to mitigate the effects of its operations on the environment and is committed to fulfilling its environmental obligations in order for its business activities to continue.
- 3.4 In particular, Ravensdown participates in planning processes to ensure policies and regulations incorporated into plans or other planning mechanisms, seek and find an optimal balance between any necessary amendments to farming activities, as well as its industrial operations, and the use of the products it has developed to assist with sustainability, growth and production in the rural sector, and ultimately the economic and social wellbeing of the rural community and New Zealand.

#### **Ravensdown's Shareholders in Canterbury**

- 3.5 Ravensdown has over 4,000 shareholders in the Canterbury region, with around 500 of these shareholders located within the LWRP's Waimakariri sub-region and over 700 within the Orari-Temuka-Opihi-Pareora (**OTOP**) sub-region. Almost half of these are sheep and/or beef farmers, with the remainder comprising dairy and dairy runoff, mixed or other livestock, horticulture, cropping systems and lifestyle blocks.

#### **Ravensdown's Business**

- 3.6 Ravensdown exists to enable smarter farming for a better New Zealand. As a farmer-owned co-operative, Ravensdown's products, expertise and technology help farmers reduce environmental impacts and optimise value from the land.
- 3.7 Ravensdown is an integral part of the food creation process, whether the food is grown for livestock or for humans. Ravensdown tests for, advises about,

manufactures, buys, ships, stores, spreads, measures and maps food-creating nutrients and fertiliser for its farmers in an integrated way.

- 3.8 Ravensdown is a science-focused organisation delivering quality agri-products, technologies and services. Ravensdown provides:
- (a) Practical insights, trusted guidance and lab-based diagnostic data on soil and plant samples.
  - (b) Environmental consultancy to assist farmers to mitigate impacts and move beyond compliance.
  - (c) Quality agri-products including agrichemicals, seeds and animal health products.
  - (d) Manufacturing superphosphate at dedicated plants in Christchurch, Dunedin and Napier.
  - (e) Lime quarries producing agricultural lime products.
  - (f) Logistics and storage of bulk fertiliser and other products to ensure they are available when needed.
  - (g) Global sourcing from top tier suppliers.
  - (h) Capability for precision fertiliser application by ground and by air.
  - (i) Map-and-measure technology for better on-farm decision making.
  - (j) Innovation and research to ensure advice and solutions are based on sound science.
- 3.9 In addition to its three superphosphate manufacturing plants, Ravensdown operates a network of fertiliser bulk stores and quarries throughout New Zealand. In the Canterbury region there are seven bulk stores as well as lime quarries at White Rock and Geraldine.
- 3.10 Ravensdown provides the nutrients that nourish New Zealand's soil which, in turn, feed the plants and animals that deliver the products that can command a premium on the world stage. Smarter farming is all about smarter choices for the environment. Sales are important but as a farmer-owned co-operative, it is not Ravensdown's policy to sell farmers more than they need. Precision agriculture is about the right amount of the right inputs in the right place, applied at the right time. Smarter farming is also about always having the right reason - the focus on the environment, community and kaitiaki (stewardship).
- 3.11 Nutrient losses from fertiliser are uneconomic for a farmer to sustain and these potential losses can be managed using a range of techniques including appropriate advice on product type, application rates and timing. Ravensdown is generally supportive of the approach contained in PC7 to control nutrient losses through good management practices (**GMP**) detailed in Farm Environment Plans (**FEP**) and supported by nutrient budgets.

- 3.12 Ravensdown also operates a user-pays consultancy, Ravensdown Environmental, as a business unit within Ravensdown. The team has a strong relationship with Environment Canterbury in implementing the LWRP farming land use provisions through completion of nutrient budgets, Farm Environment Plans and resource consents.

#### **4. MATTERS ARISING FROM PROPOSED PLAN CHANGE 7**

##### **Concerns Relating to Flawed Proxies in Farm Portal**

- 4.1 The S42A Report refers (at paragraph 3.4 – 3.7) to the potential for the Farm Portal to generate erroneous GMP loss rates through the application of a set of modelling proxies to uploaded OVERSEER nutrient budgets. The flawed proxies relate to irrigation and fertiliser as set out in Schedule 28 of the CLWRP.
- 4.2 The GMP Implementation Working Group (established in 2019 following PC5 being made operative) provided recommendations to the Council in relation to the flawed proxies for irrigation and fertiliser, including that the notification of PC7 be delayed until the issue was resolved.
- 4.3 My understanding is that under the operative LWRP, applicants have the choice of applying for resource consent using the Farm Portal generated GMP loss rate (which includes the erroneous proxies) or applying through the equivalent pathway, whereby a manual review of the nutrient budget is completed by Council staff to determine whether it reflects GMP. While the equivalent pathway provides a viable alternative for consenting, it does not preclude resource consents being granted with erroneous GMP loss rates that have the potential, depending on the farm-specific circumstances, to enable the use of unnecessarily high quantities of nitrogen fertiliser, or to preclude its use entirely.
- 4.4 Ravensdown considers it important to note, within the context of PC7, that the issues with the Farm Portal producing erroneous GMP loss rates remains<sup>1</sup>. Ravensdown would support further technical work being completed to resolve the issues with the fertiliser proxy in the Farm Portal and would be willing to assist, if requested by the Council.

##### **Nitrogen loss reductions in OTOP Levels Plain HNCA**

- 4.5 Ravensdown's Seadown store is located within the Levels Plain HNCA. Ravensdown recognises and supports the need for industrial activities to make reductions in their contaminant losses to contribute to better water quality outcomes.
- 4.6 However, Ravensdown, as outlined in our submission, would prefer that rather than the absolute 30% reduction from current consented limits as proposed in PC7, a better approach would be to consider reductions of 30%, as a whole, from industrial activities, in line with the OTOP ZIPA recommendations. As I read the OTOP ZIPA recommendation (Recommendation 5.4.3(II)), the 30% reduction reflects an overall goal for the HNCA, not a requirement for each individual industrial activity.

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<sup>1</sup> Also acknowledged in a letter from Council Chair Steve Lowndes to Dr Andy Pearce, Facilitator of the GMP Implementation Working Group, 8 July 2019.

- 4.7 I consider that taking an approach that provides the Council with some flexibility to adjust the reduction to better reflect the scale and intensity of the activity, and any associated effects on the environment, is preferable. While in some cases, a 30% reduction from current consented limits will be appropriate (and I note that at our Seadown Store we consider this reduction challenging but achievable), some activities may already be operating at or close to 'best practice' where such a reduction could impact on business viability while resulting in minimal improvements in environmental outcomes, especially where the activity is contributing contaminants at the low end of the scale. Ms Taylor will address this amendment further in her evidence.

## **5. CONCLUSION**

- 5.1 In conclusion, Ravensdown supports effects-based approaches to regulation, if needed, to reduce the environmental impacts of farming. As outlined in our evidence there are some aspects of PC7 and PC2 that we consider could be amended in order to provide clarity to plan users and give Council the information they seek in order to progress the reduction in contaminant losses to the environment, particularly from farming activities.
- 5.2 While some of Ravensdown's submissions have been addressed through the section 42A Report's recommendations, some matters require further consideration and amendment. In addition to the two matters discussed in my evidence (flawed proxies in the Farm Portal and reductions in N losses for industrial activities), Dr Roberts and Ms Taylor have addressed other matters which in our opinion warrant further consideration.



**Anna Wilkes**  
**17 July 2020**