

**From:** [Bruce Waddleton](#)  
**To:** [Mailroom Mailbox](#)  
**Cc:** [Alizon Paterson](#)  
**Subject:** Plan Change 7 to the LWRP Submission  
**Date:** Friday, 13 September 2019 12:22:40 PM

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Hi

Please find attached a submission made by the Canterbury District Health Board on Plan Change 7.

Regards

Bruce Waddleton  
Health Protection Officer  
Community & Public Health  
310 Manchester Street, PO Box 1475  
Tel: 378 6740 Fax: 379 6484

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# Canterbury

District Health Board

Te Poari Hauora o Waitaha

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## Submission on Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan

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**To:** Environment Canterbury  
PO Box 345, Christchurch 8140

**Submitter:** Canterbury District Health Board  
  
Attn: Alizon Paterson  
Community and Public Health  
C/- Canterbury District Health Board  
PO Box 1475  
Christchurch 8140

**Proposal:** Proposed Plan Change 7 proposes amendments to regional and sub-regional sections of the Canterbury Land and Water Regional Plan

## **SUBMISSION ON PROPOSED PLAN CHANGE 7 TO THE LAND AND WATER REGIONAL PLAN**

### **Name of submitter**

1. Canterbury District Health Board (CDHB)
2. Proposal to which submission relates:

Proposed Plan Change 7 to the Land and Water Regional Plan

### **Detail of submission**

3. The CDHB is responsible for promoting the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956. These statutory obligations are the responsibility of the Ministry of Health and, in the Canterbury District, are obligations are carried out under contract by Community and Public Health under Crown funding agreements on behalf of the Canterbury District Health Board.
4. The Ministry of Health requires the CDHB to reduce potential health risks by such means as submissions to ensure the public health significance of potential adverse effects are adequately considered by regional and territorial authorities.

### **General comments**

5. The CDHB acknowledge that Plan Change 7 (the plan) has the potential to have a contradictory range of affects on the health and wellbeing of the wider community and that a solution that produces a good health outcome for one community may produce a poor health outcome for another. While economic wellbeing is necessary for good health, social, recreational, cultural and environmental assets such as drinking water quality, are also fundamental to health. A sustainable and thriving ecosystem is vital to supporting and sustaining the health of present and future generations in Canterbury.
6. The Drinking Water Standards for New Zealand (DWSNZ) 2005/08 are mentioned in the plan however this standard has been updated and references should read DWSNZ 2005/18.

## **Tables 1a & 1b Freshwater Outcomes for Canterbury Rivers and Lakes**

7. The CDHB supports the specific inclusion of human health and cultural attributes into the Freshwater Outcomes tables associated with Canterbury Rivers and Lakes as well as the Waimakariri and Orari-Temuka-Opihi-Pareora sub-regions. Consistency with the National Policy Statement on Freshwater Management document is appropriate but the greater or less than symbols (or reference to maximum values) have been omitted for the *E.coli* figures. The CDHB supports the reference to mahinga kai gathering in these Freshwater outcome tables but are concerned that if the 95<sup>th</sup> percentile [*E.coli*/100ml] value is 1200 then the mahinga kai gathered from this waterway may not be safe to eat without appropriate heat treatment.

### **Section 4.31(b) Livestock Exclusion from Water Bodies**

8. The proposed addition reads “*excluding ... Drinking Water Protection Zones for surface water takes*”. It should be noted that the DWSNZ 2005/2018, section 5.2.1 states ‘*Non-secure bore water (springs, and groundwater that does not produce secure bore water) are considered equivalent to surface water*’. This differs from the definition of surface water in the plan which is restricted to water above the ground. The CDHB considers that livestock should be restricted from the drinking water protection zone of non-secure bore water and therefore it is not appropriate to include the term ‘surface water takes’. These non-secure shallow bores are susceptible to contamination from livestock and therefore should be protected.

### **Section 5.191(c) Managed Aquifer Recharge**

9. The proposed addition requires that the point of Managed Aquifer Recharge discharge is not within 50 metres of an existing bore used for water abstraction. We have some reservation regarding this distance as water used for abstraction could include takes for private drinking water supplies. The dimensions of protection zones for group and community drinking water vary from 100-400 metres determined using site specific information such as depth of well, pump rate, type of aquifer, types of actual and potential contamination and potential risk to water quality. Private drinking water supplies should be afforded the same separation from potential contamination as required for community drinking water supplies.

### **Table 8-7 Waimakariri Nitrate-nitrogen Limits for Drinking Water Supplies from Groundwater**

10. The CDHB is concerned that Table 8-7 proposes to limit the nitrate-nitrogen concentration for private water supplies based on a median value for all samples collected from a representative area. This will not allow for the identification of individual wells that may be over half the maximum acceptable value (MAV), 5.65 mg/L nitrate-nitrogen. The plan also does not specify how a representative area should be defined, this could have significant implications in the way results are reported. The CDHB recommend that the maximum value criteria is used to limit nitrate-nitrogen concentrations in private water supply wells. Whether the drinking water is sourced from a private or community supply should be irrelevant as the impact on the individual consuming the water is identical.

### **Table 8-8 Waimakariri Water Quality Limits and Targets for Groundwater**

11. The value for the maximum concentration of nitrate-nitrogen should be consistent with the value associated with 'Other Contaminants', (<50% MAV). Increasing nitrate-nitrogen levels in the catchment should not result in a higher threshold being applied to this particular contaminant.

#### **Section 13.4.11 Policies (Ashburton sub-region)**

12. The proposed addition states that stock will now be excluded from water containing drains, including any Main and Secondary Hinds Drains, to help reduce microbial contamination of these waterways. CDHB acknowledges the rationale for why the dry drains have been excluded from this section. However, to ensure that the intent of Option 3 on page 89 of the accompanying Section 32 Evaluation Report is met, it is recommended that other mechanisms are considered. For example, Farm Environment Plans could include other mitigation measures to help prevent faecal matter from being washed into dry waterways during rain events.

#### **Section 13.5.30A Take and Use of Ground and Surface water (Ashburton sub region)**

13. The proposed addition of Section A refers to 'acceptable bore interference effects' for groundwater takes, in situations where existing surface water takes have been switched to deep groundwater takes. The stated rationale for this new rule is to

improve surface water quality and quantity in the compromised Hinds Coastal Strip Zone, while providing a consent pathway that addresses the current non-complying activity status. The associated Section 32 Evaluation Report discusses the potential of increased pumping costs associated with adoption of this new Rule. The CDHB has concerns that the Section 32 Evaluation Report has not fully considered the cumulative impacts of increasing the number of deep groundwater takes in terms of how it might affect the distribution of contaminated water in the aquifer.

Furthermore, this new Rule will not necessarily lead to improved drinking-water quality in respect to drinking-water determinands of health concern such as nitrate. Considering the majority of households in the Hinds Plains area are dependent on their own private drinking-water supply this new Rule is of concern.

#### **Section 14.4.10 Efficient Use of Water (Orari-Temuka-Opihi-Pareora sub-region)**

14. CDHB supports the statement in section 14.4.10 to enable the taking of water for community water supplies provided a Water Supply Strategy in accordance with Schedule 25 is in place. The provision of potable water to communities is of the utmost importance and should not be compromised.

#### **Section 14.4.13 Transfer of Water Permits (Orari-Temuka-Opihi-Pareora sub-region)**

15. The proposed addition states that phasing out of over-allocated freshwater resources is to be implemented via Policy 4.50, with exceptions permitted for community water supplies. This exception has not been applied to the Temuka Freshwater Management Unit as stated in 14.4.13(c). CDHB is concerned, as this may affect the ability of Timaru District Council to continue with an uninterrupted supply of potable drinking water from its sources within the Temuka Freshwater Management Unit. CDHB recommends that the exception for community water supplies in 14.4.13(b) also be applied to 14.4.13(c).

#### **Section 14.4.31 Over Allocation (Orari-Temuka-Opihi-Pareora sub-region)**

16. The proposed addition states that if the allocation limits in the Temuka Freshwater Management Unit have not been achieved by January 1<sup>st</sup> 2035, then all surface and groundwater permits will be reviewed. CDHB recommends that this statement be

amended to exclude surface and groundwater permits for community water supplies.

#### **Section 14.4.35(d) Surface water Flows (Orari-Temuka-Opihi-Pareora sub-region)**

17. The proposed addition states that when the level of Lake Opuha falls below RL370, water released for augmentation needs to equal inflows to the Lake. CDHB is concerned that the amount of water released will not be sufficient in these situations to provide for the water takes that Timaru District Council requires to adequately supply its community water supplies. CDHB recommends that section 14.4.35(d) be amended to include the provision of water for community water supplies.

#### **Levels Plain High Nitrogen Concentration Area (Orari-Temuka-Opihi-Pareora sub-region)**

18. CDHB recommends that the Levels Plain High Nitrogen Concentration Area be extended to include the drinking water protection zones for the Pleasant Point and Seadown drinking-water supplies. There have been test results from these supplies that have exceeded 50% of the maximum acceptable values in the Drinking-water Standards for New Zealand 2005 (revised 2018). Including these protection zones is essential to mitigate the known health risks associated with elevated nitrates in drinking water.

#### **Table 14(b) Freshwater Outcomes for Water Orari-Temuka-Opihi-Pareora Lakes**

19. The measurement figure for maximum concentration of cyanobacteria should be '3' as per the New Zealand Guidelines for Cyanobacteria in Recreational Fresh Waters and should therefore be amended.

#### **Schedule 6 Bathing Site**

20. The CDHB supports the inclusion of the additional freshwater bathing sites to reflect local communities' use of various freshwater sites for recreation and the rules to exclude stock from upstream of these sites and controls on sediment removal to better protection water quality at these sites.

## Decision Sought

21. The CDHB seeks that the proposal be granted subject to the recommendation below:

- a. DWSNZ 2005/2008. **AMENDMENT** Replace with DWSNZ 2005/2018.
- b. Table 1a & 1b. **SUPPORT** The inclusion of human health and cultural attributes and reference to mahinga kai gathering.
- c. Table 1a & 1b. **ADDITION** Include 'Greater than' or 'less than' symbols in association with *E.coli* figures.
- d. Table 1a & 1b. **INVESTIGATE** The acceptability of a 95<sup>th</sup> percentile figure of 1200 *E.coli*/100ml proposed for mahinga kai gathered from waterways.
- e. Section 4.31 **AMEND** to include 'nonsecure bore water takes'.
- f. Section 5.191(c). **ADDITION** Specify that MAR not to be discharged at least 100 metres from private drinking water supplies.
- g. Table 8-7. **AMENDMENT** The same criteria for assessing limits for community water supplies should be applied to private supplies to ensure no private water supply exceeds 5.65mg/L nitrate-nitrogen.
- h. Table 8-7. **ADDITION** Specify how a representative area is defined.
- i. Table 8.8. **AMENDMENT** The maximum concentration for nitrate-nitrogen should read <50% MAV.
- j. Section 13.4.11. **ADDITION** Specify other mitigation mechanisms, for example FEPs.
- k. Section 13.5.30A. **INVESTIGATE** The cumulative impacts of increasing the number of deep groundwater takes in terms of effects on the distribution of contaminated water in the aquifer.
- l. Section 14.4.10 **SUPPORT** Enable the taking of water for community water supplies provided a WSS is in place.
- m. Section 14.4.13(c). **ADDITION** Include a permitted exception to ensure water is available for community water supplies.



- n. Section 14.4.31. **ADDITION** Include an exclusion for surface and groundwater permits for community water supplies.
- o. Section 14.4.35(d). **ADDITION** Include the provision of water for community water supplies.
- p. Level Plains High Nitrogen Concentration Area. **ADDITION** Include the drinking water protection zones for Pleasant Point and Seadown drinking water supplies.
- q. Table 14(b). **ADDITION** Include “3” to the cyanobacteria maximum value.
- r. Schedule 6. **SUPPORT** Inclusion of freshwater bathing sites.

And any additional or consequential amendments, deletions or additions that are necessary or appropriate to give effect to the intent of the submission.

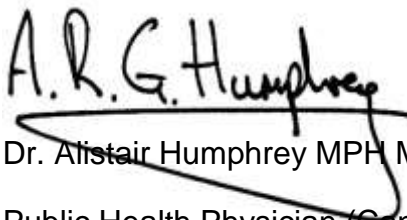
## Conclusion

22. The CDHB does wish to be heard in support of this submission.

23. If others make a similar submission, the CDHB will not consider presenting a joint case with them at the hearing.

24. Thank you for the opportunity to submit on Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan.

## Person making the submission



A. R. G. Humphrey

13<sup>th</sup> September 2019

Dr. Alistair Humphrey MPH MHL FAFPHM FRACGP

Public Health Physician (Canterbury District Health Board)

## Contact details

Alizon Paterson  
For and on behalf of  
Community and Public Health  
C/- Canterbury District Health Board  
PO Box 1475  
Christchurch 8140

P +64 3 378 6725  
F +64 3 379 6488

Alizon.paterson@cdhb.health.nz