

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

By **Carstens, J**

Submitter Identification number: **PC7-549**

Wishes to be heard: **No**

Would consider making a joint submission at the hearing: **No**

Submitted on: **11/09/2019**

This submission was submitted via Environment Canterbury's online submission portal. The Submissions portal generates pdf files of submissions (as attached). However, some of the information that appears in the pdf files is not consistent with information the submitter entered into the portal, specifically, where submitters have ticked:

- "I wish to be heard in support of my submission" ; and
- "If others make a similar submission I will consider presenting a joint case with them at a hearing".

Additionally, the submissions portal has generated submitter and submission point numbers that are not consistent with the numbering applied in the Summary of Decisions Requested. Submission points in the Summary of Decisions Requested (SODR) are numbered using the following format:

PC7 – Submitter ID #.Submission point #

The correct submitter identification number and submitter information is specified above. This will be the number referred to in the SODR.

Proposed Plan Change 7 to the Land and Water Regional Plan

Form 5 Submission on publically notified proposal for policy statement or plan, change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To Environment Canterbury - Tavisha Fernando
Date received 11/09/2019 11:02:43 PM
Submission #77

Address for service:

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Wishes to be heard? No
Is willing to present a joint case? No

Proposed Plan Change 7 has been developed to respond to emerging resource management issues, to give effect to relevant national direction, to implement recommendations from the Hinds Drains' Working Party, and to implement recommendations in the Waimakariri and Orari-Temuka-Opihi-Pareora (OTOP) Zone Implementation Programme Addenda (ZIPA).

- Could you gain an advantage in trade competition in making this submission?
- No
- Are you directly affected by an effect of the subject matter of the submission that
(a) adversely affects the environment; and
(b) does not relate to trade competition or the effects of trade competition
- No

Submission points

Point 77.1

Submission

I oppose the currently specified levels of nitrate in these tables (where they are 3.8mg/L) as they are too high. I would support nitrate levels which would protect human health and Christchurch and North Canterbury drinking water sources, which rely on functional, healthy aquifer ecosystems.

- Graham Fenwick (NZ's leading groundwater ecosystem scientist) suggests in his evidence to the Te Waikoropupu springs WCO hearing a trigger value of 0.4–0.5 mg/l as a precautionary value to ensure ecosystem health.
- Chris Hickey (NZ's leading ecotoxicologist) recommends in his evidence to the Te Waikoropupu springs WCO hearing that where long lag times apply, a management limit of 0.55–1.1 mg/l is appropriate (Hickey considers a 'long time lag' to be 8 years, whereas in the lag effects for the Waimakariri 'Nitrate priority area' is modelled as being 50+ years).

I would like to see limits set in the life of this proposed plan that achieve those ranges of limits suggested as part of the Te Waikoropupu springs WCO hearing.

Relief sought

I was not able to copy the section. However, based on Fenwick and Hickey's findings mentioned in the previous section, I believe that any part of the table where the proposed nitrate nitrogen median of 3.8 mg/l is specified will not provide for the ecosystem health of the Christchurch drinking water aquifers. The annual medians must be set at a lower level of at least 1.0mg/L or lower.

Water is a precious resource and must be protected for future generations.

The water must also be safeguarded based on the following:

- The New Zealand Conservation Act 1987 and the New Zealand Biodiversity Strategy requires regional councils to ensure that the intrinsic and other values of all biodiversity (including that of “underground aquifers”) are adequately maintained and safeguarded for future generations.
- The ecosystem services delivered by groundwater biodiversity are integral to sustaining groundwater and surface water resources, cultural identities and economies at local, regional and national levels.
- The Resource Management Act 1991 (and amendments) requires regional councils to ensure the sustainability of these ecosystem services (safeguard “the life-supporting capacity of air, water, soil, and ecosystems” by “avoiding, remedying, or mitigating any adverse effects of activities on the environment” to ensure that the needs of future generations are met.).
- The NPS-FM Appendix 1 sets out national values and uses for freshwater including supporting a healthy ecosystem appropriate to the freshwater body type, and maintaining ecological processes within that system. Matters to take into account for a healthy freshwater ecosystem include the management of adverse effects on flora and fauna of contaminants, changes in freshwater chemistry, excessive nutrients, algal blooms, high sediment levels, high temperatures, low oxygen, invasive species, changes in flow regime and the connections between water bodies.
- The aquifers that provide drinking water to Christchurch, North Canterbury towns and other areas in Canterbury require specific protection.
- I consider that the implication for future nitrate pollution of Christchurch’s drinking water is inconsistent with Strategic Policies 4.4 and 4.5 in the [Land and Water Regional Plan](#).

Section: Section 8 Waimakariri

Sub-section: 8.6 8.7 Allocation Limits and Water Quality L

Provision

Table 8-5: Water Quality Limits and Targets for Waimakariri Rivers