From: Dominique Schacherer
To: Mailroom Mailbox

Subject: plan change 7 to the LWRP Submission **Date:** Saturday, 14 September 2019 6:04:52 PM

To whom it concerns

I consider the implications of nitrate leaching in the Waimakariri 'Nitrate priority area', which is modelled to result in a nitrate level of 3.8 mg/l, poses an unacceptable risk to the drinking water of current and future Christchurch citizens.

The decisions we make today will have serious and lasting implications for current and future generations and I believe it is entirely inappropriate for the activities of private individuals and enterprises to put at risk the drinking water of nearly 400,000 people, with population projections estimating 500,000+ by the time nitrate contamination levels are expected to reach 3.8 mg/l.

I strongly support a science-based precautionary approach to both the protection of human health and the protection of Christchurch's 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 (NZs 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.

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.).

I do not believe that because the modelled nitrate pollution is 50+ years away, that it is of any less immediate concern (particularly because ECan's monitoring shows the northern bores are already showing increasing nitrate levels – in line with the model's predictions). Younger and future generations will be facing much greater challenges in the form of climate disruption and all the social, cultural,

environmental and economic issues associated with such disruption. The least we can do is provide them a safe, ecologically functional water supply, just like we enjoy today.

Please make the right choices for our future- Dominique Schacherer