From: Stephen Howard
To: Mailroom Mailbox

**Subject:** Plan Change 7 to the LWRP Submission **Date:** Friday, 13 September 2019 11:58:55 AM

Attachments: Submission on Nitrate.docx

Kia ora

Please find attached my submission on the plan changes 7 and 2

Naku noa na Stephen Howard

## Submission on Nitrate/nitrite levels in Canterbury water and water allocation

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My submission is not a technical submission but one founded on my personal experience and what I see happening to the water supply on the small holding I plan to leave for my children and which my children have expressed a desire to keep and enjoy.

I have been a residing on the block at the above address since about 2003. When I first applied to build my modest abode, I was required to get a test on the water in my bore for quality. At that time my water quality was very good with only a little iron to comment on. My well is about 33 metres and my pump reaches down about 28 metres. It seems that this shallow aquifer, shallow for on the plains not for coastal aquifers, seems to respond to flows down the Eyre River. The only time I have had problems with enough water was when, one spring/early summer, there had been no flow down the Eyre and after there had been increased building in the area.

It is possible I have been lucky, as my neighbours have told me that their wells ran dry in more than one period. There has also been great increase in the number of dwelling occupied in the area which of course puts more pressure on the shallow aquifer.

About a year and a half ago Waimakariri District Council (WDC) sent out a notice canvassing interest about putting in and running a council owned and operated water supply reticulated from a deeper aquifer. This would incur direct costs of reticulation to my boundary of about \$15000 (not being at home at time of writing I do not have the exact figure) and an annual charge added to my rates for the water supply. It would also incur costs directly to me of setting up a reticulation scheme and tank within my boundary.

As well as security of supply the WDC gave as a reason for considering this an expected increase in leaching of nitrate/nitrites into the aquifer, possibly to a level which would be threatening to health. The question is who/what is driving this expected increase in the pollution of what is close to a pristine water supply. The small holdings/lifestyle blocks do not use a lot of chemical fertiliser so the only source must be the increase fertiliser use by the large irrigators with their intensified farming, especially the dairy farmers.

As I said above this is a subjective submission, but I did attend a lecture by Mike Joy describing the damage to surface water/water ways of the current levels of pollutants accepted by ECAN, and I have read about the Danish study with its results showing that nitrate/nitrite levels far below what ECAN current permits are possibly implicated in Aoteroa's and especially Canterbury's high levels of bowel cancers. The present accepted levels for nitrates in both surface levels and drinking water are far too high, and the testing regime is not rigorous enough.

I would like decisions about water and pollution to be considered in light of;

- How ECAN going to ensure that the extra cost of obtaining clean water, that is generated by this irrigation and fertiliser use, is sheeted back to the users of large quantities of water and fertiliser.
- That ECAN should ensure that users allow zero run off polluted water and zero contamination of any of our aquifers
- That all costs of rectifying pollution be covered by the polluters
- A realisation that large scale dairy farming is not really suited to the Canterbury plains with its very permeable gravels
- A recognition that Lincoln university has shown that dairy farmers can maintain profit even by with lesser production as they cut inputs
- That gambling our water supply on a sector, dairy exports, that is hugely volatile on world markets is a gamble that Kiwis, if they were aware of it, would reject
- And finally that polluting our aquifers so that a small number of corporate farmers and their financing banks can gain from capital gains is neither good economics nor acceptable environmental protection

Thank you for considering my submission