From:	<u>Tony Howey</u>
To:	<u>Plan Hearings</u>
Cc:	Tony Howey
Subject:	Evidence for Plan Change 7, ViBERi New Zealand Ltd
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Attachments:	Plan change 7 Evidence 17Jul20 (002).pdf

Please see attached our evidence for Plan Change 7

Regards,

Tony Howey 021.318441

## ViBERi New Zealand Evidence for Ecan Plan Change 7

By way of introduction, my name is Tony Howey. Our family have farmed in the Levels Plain area since 1987. I have been very involved in irrigation and water management on our own properties and in governance roles; Levels Plain Irrigation Co, South Canterbury Farmers Irrigation co, Opuha Water Ltd and served a number of years on the OTOP Zone Committee and prior to that on reference groups. Additionally, I have been very involved in the establishment of a number of local commercial businesses, namely; Seedlands, Southern Packers, Grainstor and Farmers Mill. I hold a degree in agriculture commerce and we have attained a number of farming awards. I wrote both the submission and this evidence on behalf of our farming and food business company; ViBERi New Zealand Ltd. While much of the evidence below might be taken as being opposed to any restrictions affecting farming practices, we operate a very sustainable organic farming operation and very much value better environmental, recreational and cultural outcomes for the wider community. The points made below are about wanting to see sensible and achievable rules that are well researched and that give achievable targets for the community to strive for.

#### Introduction of Company

ViBERi New Zealand produces certified organic blackcurrants and redcurrants on 72 irrigated hectares and maintains a sheep flock during parts of the year to control weeds. Additionally, we run a small herd of fallow deer on the neighbouring Meadowlinks deer park.

The growing of blackcurrants is considered environmentally benign, as there is very little use of fertilizers, the crop is perennial (no cultivation, so little mineralization) and stock numbers are low, and only sheep are used. Growing organically is even more environmentally benign. With no added chemical nitrogen or phosphate, our N leaching is very low and short of ceasing all farm activities and planting the orchard in forestry, we don't see how we could further reduce our environmental footprint.

Despite our low environmental impact, we consider our land use intensive where we employ 11 staff and produce significant economic activity off only 72 hectares. This is made possible through the use of intensive irrigation water on free draining soils. Being organic means we use more water than if we were not organic as we have significant water use by the grass and broadleaf weeds that compete with the blackcurrants for water and nutrients.

We draw water from a consented well that is hydraulically linked to the Opihi river and from the Levels Plain Irrigation system main race at the most western end of the scheme.

#### Historical context of Opuha Dam and implications of Plan Change 7 impacts

Having been directly involved in the promotion and governance of the Opuha Dam from its inception up until a few years ago, I am very concerned that the changes proposed by Plan Change 7 in 2030 will mean that the reliability of irrigation water for farmers will be significantly compromised. When the scheme was promoted to farmers it was on the basis that farmers and the other commercial investors would fund the Dam in its entirety even

though over \$10 million of the costs of the project related to non-commercial, environmental, cultural and recreational benefits (while acknowledging there was a small \$1m environmental grant from the government).

Farmers undertook this investment on the understanding of a defined reliability factor determined by the new operating rules and on historical hydrological data that would extend for the term of the 35-year consent period and beyond. For the operating rules to be arbitrarily altered through the 35-year consent period is manifestly unjust and inequitable to those farmer investors.

It should also be noted that the conclusions of the Harris Report in 2006<sup>1</sup> to assess the economic effects of the Opuha Dam, 10 years post construction, clearly identified that the main beneficiaries of the significant investment into the Dam Project was the community at large, rather than the farmer and other investors in the Project.

I concur with the Opuha Water Ltd submission that the changes proposed for the Dam to operate in will mean less irrigation reliability and will not only impact of farmer incomes, but will impact on land use. Being on the board of Horticulture NZ, I am keenly aware that the Government is promoting investment into horticultural developments that will boost regional economies, grow much needed export revenues and provide employment opportunities, particularly in the post Covid era. All horticultural developments require significant capital investments and will only occur where there is either very reliable rainfall or where there is reliable irrigation, and by reliable, it needs to be 95%+ reliable.

## **OEFRAG Water Management**

One of the huge successes of the Opuha Dam project has been the win-win position across different community stakeholders. This was demonstrated to me when I heard a Fish and Game officer laud the benefits of the Opuha Dam after two dry seasons where otherwise the river would have gone dry and their organization would have had to revert to the predam activity of fish salvaging. The river not going dry only occurred because the stakeholders represented on OEFRAG recognised the dry conditions early and all parties took voluntary cuts to both abstraction and modifications to minimum flows. This group is about local people managing the river for the best interests of the local and wider community and I would urge that this body and its function be retained in its current role. I therefore support the submissions of the Adaptive Management Working Group in this regard.

# Levels Plain HNCA

As previously mentioned, our organic blackcurrant orchard is located at the most western corner of the Levels Plain area, and where the Levels Plain irrigation main race traverses through the edge of our property. Environment Canterbury has been using an unused well on our property for many years to monitor the nitrate levels in the ground water, which is located approx. 500m west of the main race. Nitrate levels in ground water have often been recorded as high, sometimes above 11.3mg/l at this site. There has been no influence of farming on the Levels Plain, as this is the ground water entering the area, so Levels farming

<sup>&</sup>lt;sup>1</sup> The Opuha Dam: An ex post study of its impacts on the provincial economy and community, Harris, Butcher & Smith, Aug 2006

practices being required to achieve nitrate-nitrogen groundwater levels of half the maximum levels of 11.3 mg/l (ie 5.65 mg/l) is non-sensical. If these arbitrary groundwater nitrate levels are imposed, it will likely mean all farmers in the Levels plain area will be in breach, even in the absence of any farming activities given that the nitrate levels of groundwater entering the designated area is often very high.

While there has been an economic study authored by Simon Harris in 2019 that discusses the impacts of the OTOP ZIPA, this has been conducted on the basis on the reduction of nutrient losses beyond GMP by 20% for dairy and 10% for other land uses for the Levels Plain area. I have four concerns about this;

- 1. The economic impact as described in the report is significant and with the changes to the local and world economies, we should be more cognisant of negative economic impacts bought about by plan changes.
- 2. Good Management Practice (GMP), is by definition "good management practice". To restrict farming practices by limiting nutrient applications would either mean that the criteria to determine good management practices is flawed or the new plan requires farmers to adopt "Poor Management Practice".
- 3. There is no science as to why a limit for ground water should be 5.65 mg/l when the world health limit is 11.3 mg/l. There are also no compelling reasons in the Plan for this level to be reduced to 5.65mg/l.
- 4. As discussed above, 5.65 mg/l is an impossible target even in the absence of any farming in the Levels Plain as the incoming groundwater is always in excess of this level. Setting an impossible target that has no science supporting such a level will lead to unrealistic expectations from the community and mean farmers will always be under pressure to mitigate to a level they can't achieve.

In my view, PC7's provisions for the Levels Plain HNCA should be deferred until robust analysis and options to address upstream sources of nitrate have been completed and the groundwater nitrate levels in the Levels Plain area should be set at world health levels of 11.3 mg/l in the interim until scientific evidence would suggest that levels below this should be adopted.

# Change to Stream Depletion Methodology

While I can understand that a consistent stream depletion methodology would be desirable across all of Canterbury, to alter the methodology without specifically mentioning such a change in the consultation documents not only does not allow affected parties to realize the change, and therefore submit, but is extremely inequitable to those affected parties.

Changing the methodology from a 30-day pump test to a 150-day pump test will mean that some irrigated properties will not be able to irrigate causing significant economic hardship to those affected parties, and for what real benefit? All the river flows and hydrology of the Opihi system, and therefore the minimum flow regimes and areas that could be irrigated were predicated on these existing water takes. Additionally, there has been no thorough economic analysis done to show the effects on these affected parties or the catchment community as a whole. There needs to be a lot more consultation and analysis of the effects of making this change before being part of any plan review. I therefore seek that the current ORRP stream depletion methodology be carried over until that has occurred.

### Capping of groundwater takes

As proposed, all groundwater takes will be capped in the Levels plain area. There has been no evidence or rationale presented that would justify such a draconian mandate. Surely any consent application to abstract groundwater should be treated on its relative merits. There is no evidence provided that the groundwater resource is over allocated and in parts of the catchment there are issues with the water table being near the surface with resulting drainage issues, so in these areas in particular it is counter-productive to restrict new water abstraction from groundwater.

To cap all groundwater takes also prevents landowners that might be caught by the change in stream depletion methodology from seeking alternate water sources farther away from the river. In my view, if PC7 should set allocation limits for the Levels Plain area, these limits should recognise that the Levels Plain is not presently over-allocated and provide for further sustainable groundwater abstraction.