RE: Submission to the Proposed Plan Change 5A (Lindis: Integrated Water Management) - 69 THOMSON GORGE ROAD

Our submission is broken down into two categories, economics and the level of certainty around the information that has informed the plan change thus far and the implications that these have on us.

Economics

1. We own two (2) Blocks in the Ardgour Valley.
    - Shephards Creek is irrigated via the Lindis Irrigation Scheme, surface water. We are in the process of installing more efficient use of water systems, starting with K-line system.
    - Ardgour road pivot block is irrigated with a lateral pivot extracting water at 20 l/s from a groundwater bore on the property.

2. We grow winter feed on this block for a client for up to 500 beef cattle. The establishment of the winter feed is totally reliant on the pivot irrigation from approximately November to April.

3. Whilst we are not opposed to a minimum flow on the Lindis river effecting our Shephards Creek property, we are opposed to a minimum flow on our ground water bore on Ardgour road.

4. We purchased the property some two years ago as it uses groundwater for irrigation purposes which is generally considered to be more reliable source of water than surface water. We note that the economic study undertaken by BERL indicates that there will be a 5.6% reduction in gross margin through the implementation of a minimum flow which they consider would have less of an impact on the region than the fluctuation in environmental conditions on water availability.

5. In order to minimize the loss and wastage of water we have installed a lateral pivot irrigation system, and operate as efficiently as currently possible. As our groundwater bore does not appear to have a high connection to the Lindis River being on the boundary line of the Lindis Ribbon Aquifer we are buffered against the fluctuations in environmental conditions, and our water supply is constant throughout the year. As our farming operation has been set up around a reliable source of water, we believe that to impose a minimum flow of 750l/s on this bore would have a greater effect on us than a 5.6% reduction in gross margin and could effectively put us out of business.

Levels of certainty

6. We support a minimum flow in principle however we do not believe that the level of certainty around the way that the groundwater behaves in the Lower reaches of the

Lindis catchment warrant the heavy handed approach currently being put forward as part of the plan change.

7. Direct connection of groundwater in the lower Lindis Catchment is assumed, hydrological assessment of the Lindis catchment to date has considered only the naturalised flows in the Lindis River and not the storage and abstraction from the shallow groundwater system. As a consequence, the analysis is likely to be conservative[1].

8. This difficulty in separating 'surface water' from 'groundwater' within the lower catchment means that groundwater bores on the edges of the Lindis Ribbon Aquifer boundary line, which may be located in a losing reach of the river are still treated as surface water when these could very well be an alternative to using water that comes directly from the river in terms of the effects that these bores would have on the water levels in the Lindis River.

9. We believe our groundwater supply is only moderately linked to the Lindis River and will be cut off for an unreasonably large proportion of the time, should the minimum flow of 750m^3 be adopted when the lag time and indeed the effect on the Lindis River waters by our bore may be less than minor. Adopting a minimum flow as high as 750l/s without substantial scientific evidence imposes a significant burden on ground water bores that may only be moderately connected to the Lindis River.

10. The Lindis Ribbon Aquifer is a schedule 2C aquifer and as such is treated as ground water. Taking the approach of treating groundwater as surface water as is currently done is not our principle concern however, it is the fact that taking ground water is afforded the activity status of a prohibited activity under the Water Plan. This along with the proposed minimum flow restrictions removes the ability to further add to the knowledge of the catchment through individual consents, as they cannot be accepted.

11. There is then no opportunity for further analysis on the connectivity that individual bores on the periphery of the Lindis Ribbon Aquifer may have on the Lindis River. This removes the ability to make better decisions as more information comes available. This is inconsistent with the principle of adaptive management which is applied at the policy level but not at then not at the catchment level.

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[1] Lindis Catchment Hydrological analysis to support an economic assessment of the potential impact of a minimum flow regime for the Lindis River – Opus International Consultants Ltd 2015

Recommendation

12. We consider that there is a low level of certainty around how groundwater behaves in the Lindis Catchment and that there is a lack of understanding around the economic implications for the community (other than a high level overview) and would either like to see,
    a. more input into the science around how groundwater interacts with the Lindis River; or
    b. be afforded the opportunity to provide our own analysis at a resource consent level by seeing the activity status changed to at least non-complying, for bores that may not have a direct connection to the Lindis River, and as such could operate under a different minimum flow.

13. We believe that this approach would give the community the opportunity to explore alternative water sources and go towards mitigating the impact that the proposed plan change would have on individual landowners.