IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions on

Proposed Plan Change 3 to the Land and

Water Regional Plan

BY OTAIO WATER USERS GROUP

Submitters

TO CANTERBURY REGIONAL COUNCIL

Local Authority

BRIEF OF EVIDENCE OF DAVID SCOTT

Dated: 10 November 2015

GALLAWAY COOK ALLAN LAWYERS DUNEDIN

Solicitor on record: B Irving Solicitor to contact: B Irving P O Box 143, Dunedin 9054 Ph: (03) 477 7312

Fax: (03) 477 7512

Email: bridget.irving@gallawaycookallan.co.nz

INTRODUCTION

- My name is David Scott. I operate Scott Partnership Lyalldale with my wife. Our operation comprises approximately 750ha is a mixed cropping entity growing wheat, barley, oil seed rape, ryegrass, peas, red beet, linseed etc with dairy support in the form of maize silage, Lucerne, balage, and winter grazing. We also produce several thousand bales of straw and grass balage which are sold off farm. Approximately 240 ha is an irrigated block in the Otaio Catchment.
- 2. Irrigation is an absolutely integral part of this farming system. It complements our dry land areas and significantly enhances the profitability of the whole enterprise. It gives us extra crop options (eg red beet, maize, radish, borage and other higher grossing crops). Our winter feed is grown under irrigation and balage and straw produced on other parts of farm are used to supplement this.
- 3. We have 3 surface takes totalling 60 l/s and a deep take with approx 250,000m³ allocation per year. Over the years we have developed an integrated system to deal with the unreliable nature of the Otaio water system with an emphasis on having a low exposure to high water needs to reflect the low water reliability during summer (eg Autumn sown crops, with watering needs finished early summer). Following this, winter feed crops are grown with the hope of late summer to autumn rains increasing the reliability of irrigation water. It must be remembered that one of the main reasons we have been able to deal with the low reliability of this irrigation system is because a lot of the original capital cost was very low and infrastructure has been built up over a long period of time (eg some of our original underground mains were put in the late 60's, early 70's).

4. <u>Deep Water from surface allocation swap.</u>

Since this Plan is to have a long term fix for the river and the community it has been identified some surface water takes could be "traded" for either storage system's or deep groundwater. It is thought there needs to be a reduction in surface allocation to reach the Plan's goals for river flows. Allowing an economic water trade

would also meet the needs of the community and the future of the Otaio River.

- 5. Deep ground water is seen as a possibility on our farm to move forward and meet some of our future needs once minimum flows are in place. It has to be remembered though this is a very expensive remedy in comparison to what we are currently doing. There is a real risk of not actually being able to find suitable supplies of deep groundwater. The region is known for sand in wells with some bores also having low water yield. The attraction to us would be the increase in reliability and we would seek to exercise the whole of our current consent, all be it through deep ground water.
- 6. As noted in other evidence there has only been water meters recently put on our low cost surface takes and as such no real long-term record of how much water has actually been used. I feel that these consents entitled us to pump at the full consented rate for the whole season and this is what we would be trading.
- 7. This is critical for us because the increased reliability of deep water would be needed to offset the high cost of capital needed to establish the new well at over \$200,000 and also the extra on-going pumping costs. Depending on how deep it is pumped from, this may be 1.5 2x more. As stated by Mr de Joux deep water is allocated on a yearly volume, it is felt there needs to be room to be flexible on the rate (I/s) of take so as to accommodate practical factors such as pump sizing, other current infrastructure, optimum flows for guns, pivots, k-line etc.
- 8. Along with this a further concern we have with a reduced allocation (actual usage from surface water), it does not allow for a long term solution which is the goal of the "Plan". Setting the volume at what was used and not what our current consent legally allows us to do will effectively freeze our progress. If not make us go backwards given increased costs.

- 9. Hunter Downs is seen as a whole farm solution whereas the deep water swap would complement our current situation. The extra cost for this water scheme would have to be met by increased intensification (eg dairy conversion).
- 10. So while Hunter Downs may be viewed as a possible option it is a more expensive option. The costs of getting the water to the gate are significant given the relatively small area of land that we irrigate.

OUR PLANS FOR THE FUTURE

11. If it is made viable to swap water, we are unlikely to change our farming model. Increased reliability of water supply will improve our productive potential, although overall our profitability will remain similar due to the increased costs. Increased reliability from deep ground will have the advantage of being less susceptible to drought which is a constant threat in Canterbury. Risk of drought is increasing as we begin to see the effects of climate change. Increased reliability will also help us improve our nutrient management. Well watered plants will utilise nutrients more readily reducing potential leaching of contaminants. Over the long-term with GPS and yield mapping this will be the new frontier in nutrient management. If water reliability is negated extremely good outcomes will be achieved in regards to this.

David Scott

Scott Partnership Lyalldale

10 November 2015