**BEFORE THE CANTERBURY REGIONAL COUNCIL**

**In the matter of** The Resource Management Act 1991

**Between**

**CANTERBURY REGIONAL COUNCIL**

Consent Authority

**And**

**IAN KERSE AND NEIL KINGSTON**

Submitter

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**BRIEF OF EVIDENCE OF IAN KERSE**
**FOR HEARING THREE**
ORARI-OPIHI-PAREORA SUB CHAPTER (Section 14)

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## Introduction

1. My name is Ian Kerse. My family moved to our property at Silverton Road from Southland in 1968. My father started irrigating in 1971.I purchased the property in1983 and have farmed in partnership with my wife Jennifer since 1985.

2. Upon renewal of our water right in 1999 we were given a low flow restriction on Coopers Creek (based on very limited flow measurements) which has proven to be grossly unreliable. What was considered to be a 5Y7DLF is now thought to perhaps be more like a MALF.

3. In the ensuing years we have had to draw on our equity to maintain a viable business. Our operation is a small property of 159 Ha which requires reasonably reliable irrigation to remain an economic family unit.

4. We farm cattle, sheep and crop. The extra capital required to source alternative irrigation water would force us to seriously consider converting to a dairy operation to maintain a viable family unit.

5. It would be a real shame if we undertook huge capital expenditure to source alternative water and the creek showed insignificant improvement in flows. Decisions of this sort must be based on robust proven science, with actual data.

6. After more than 2 years of negotiations with ECan, in March this year we were granted an interim change of conditions for the next 5 years, albeit at a reduced take rate. We are now on minimum flow conditions as per the notified plan for the Orari section, Table 15. This process has cost us in excess of $14,000. Overall, since 2001, we have spent nearly $45,000 trying to address the disparities between ourselves and our neighboring irrigators. The plan provides equity and options for transfers for irrigators within the Upper Coopers Creek catchment.

## Some history

7. Having lived with the creek for some 45 years I have observed significant changes in the Upper Coopers Creek:

- Extensive man-made channeling, stop bank construction, shingle buildup, mechanical shingle removal.

- Significant flood events – most notably the 1974 Blandswood flood which started the movement of a huge quantity of shingle down the system.

- Regularly running dry below State Highway 72 (more often than not every year) and in drought years drying upstream of State Highway 72, even before the irrigation development years in the late 1990’s.

8. Another significant factor contributing to the perceived decline in the creek would have to be ECan planting the Orari riverbed with pine trees in the early 1980’s, on the north bank

of the Orari River, 4.5 km downstream from the gorge. The approximate area covered on the north bank adjacent to the springs up to Silverton Corner is 180 Ha. This area of 30 year old Pine plantation must take significant water from the shallow aquifer which feeds the springs, compared to the scattered poplars and gorse which previously covered the area.

## What we have done

9. We have worked with ECan and set up a long term flow monitoring weir at the outlet of the springs to gather data to help us understand the behaviour of the spring system compared to surrounding waterbodies. This is because all the reports done to date (Burberry and Golder's especially) comment on the lack of reliable data and the need for extensive monitoring and testing.

10. We have installed water metering and telemetry on our pump well before we were legally required to, as have other adjacent irrigators.

11. We are undertaking water quality measurements on a regular basis from the springs and at specific points further down the stream system.

12. We have undertaken ongoing fencing and riparian plantings to protect the springs and creek.

13. We are in the process of setting up a "Farm Environmental Plan" and "Nutrient Budgets" which will be operational by the time of this hearing.

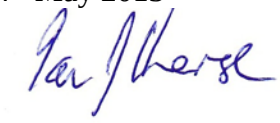
14. We have commenced being involved with a catchment water users group to work through with various stakeholders the flow and water quality issues of the Upper Coopers Creek.

## My conclusion

15. Although I have serious reservations about the "Conjunctive Use Model" and other models used to calculate and predict effects, I support the steering committee's recommendations that we go onto the flow site on the Orari mainstem and review the situation 3 years after the plan becomes operational. I realize the steering group have thoroughly explored the alternatives and have settled on an appropriate compromise, (as long as the expected effects and reliabilities are realized).

16. I hope we will be able to form a long term, satisfactory, sustainable, equitable resolution to the issues around Upper Coopers Creek, based on robust science collected over a number of years, rather than on dodgy fabricated models and emotion.

Ian Kerse
14th May 2013



# Further Evidence

## Coopers Creek State Highway 72 Minimum Flow Site

1. Below is my personal explanation as to why 50l/s on the Coopers Creek at SH72 is completely inappropriate and why I support the plan as notified

2. Flows are not measured regularly – Sometimes 4 to 6 weeks between manual gauging.

3. Frequent floods and gravel removals which drastically alter the site. I have photos to demonstrate this.

1. View from SH72 bridge looking down stream.
Guaging site is approximately 150 meters down stream from the bridge.

Same view showing gravel on banks excavated by the District Council about a month ago.


4. Inaccuracies – Last January flows in Coopers Creek at SH72 were recorded as 507 l/s. I was told the decimal point was wrong, should read 50.7l/s, and then later on in February was recorded as 2 l/s on the restrictions website.

5. Example of how unfair this 50l/s minimum flow was that had previously applied to my consent for some 13 years - 5th Feb 2010 restriction was enforced with a reading of 13 l/s. At the same time flow in the Orari River at the gorge was 4.087 cumecs that day. The flow in Coopers Creek at the gauging site didn't get back to over 50 l/s until the 24 May. In fact the creek dried up to about 400 meters above the SH72 bridge. In all this time the flow in the Orari Gorge didn't get anywhere near the restriction level of 2.1 to 2.2 cumecs (the levels where two of my neighbours consents cease abstracting).

6. Coopers Creek restrictions at SH72 have been occurring more frequently over the last 13 years. However Ken Rutherford (earlier owner of Mulligan's property) states the creek went dry up to the house now owned by Sintenie's in the summer of 1975/76 well before any large scale irrigation development.

7. The last 13 years of being on this restriction has severally affected my farming operation. It's been a "Claytons irrigation consent" unable to be used when you really need it. Hence the reason for pursing my change of minimum flow, along with Neil Kingston to that of the notified plan to Orari River, upstream of Ohapi consistent with Table 15

8. Some of the effects I have had to deal with as a result of the 50l/s minimum flow restriction on Coopers Creek
    - Having to renege on Bull Beef supply contracts
    - Having difficulty in securing Heifer grazing contracts
    - Having to sell store lambs in dry years to a very depressed market
    - Winter feed crops not reaching their potential yields
    - Difficulties in negotiating potato leases

9. At our Coopers Creek Catchment Group meeting on the 28 February 2013 Graeme Clarke (Ecan water quality scientist) presented data dating back to 1998 showing no significant decline in water quality for Coopers Creek to date.

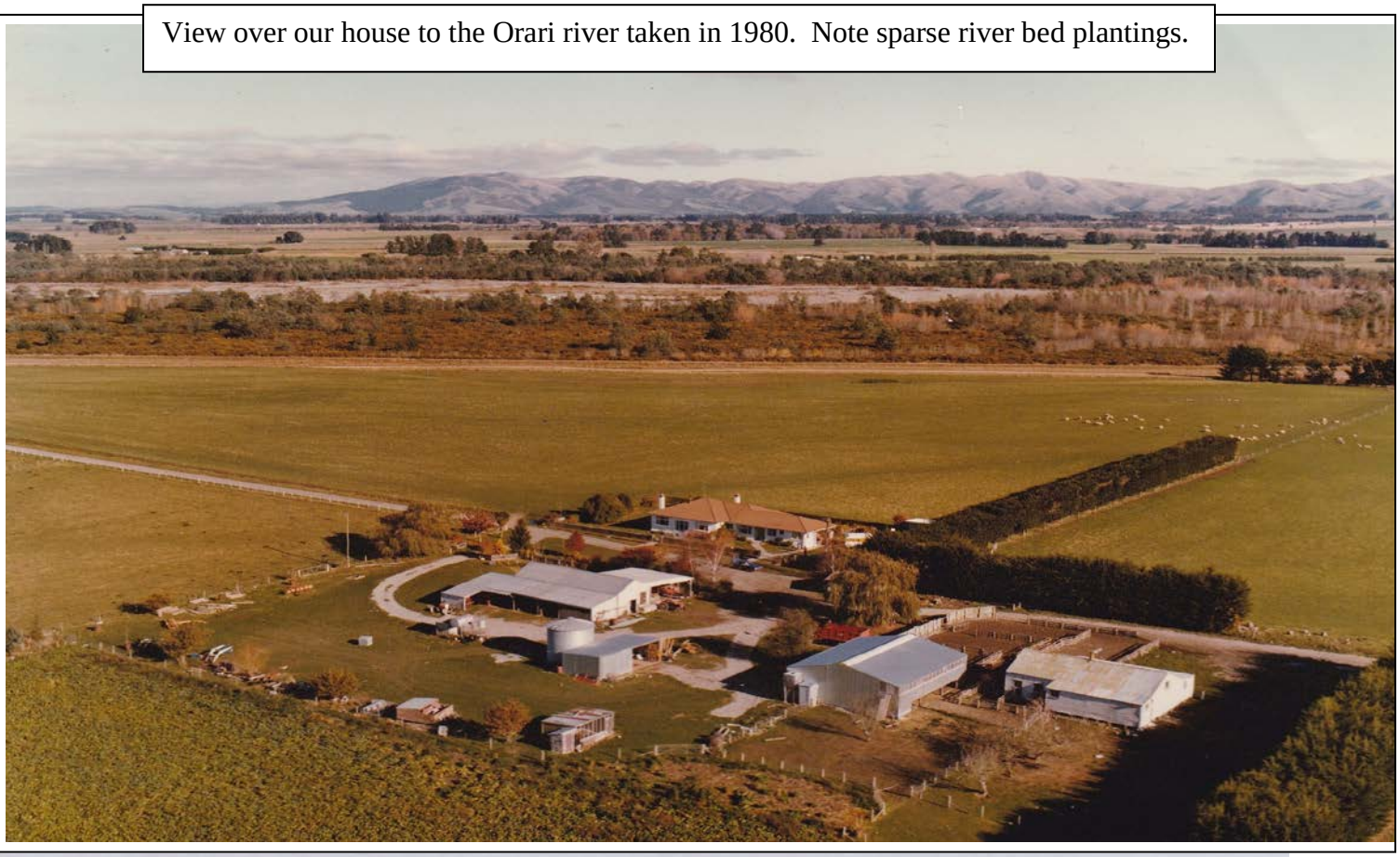
10. My property is too small to be economic without reliable irrigation and if I have to source an alternative water supply then this extra cost would force me to seriously consider a conversion to dairy unit to maintain my viability.

11. We have just completed a “Farm Environmental Plan” which basically has put down in black and white what we have been trying to do anyway. Use best practice and minimize our environmental footprint.

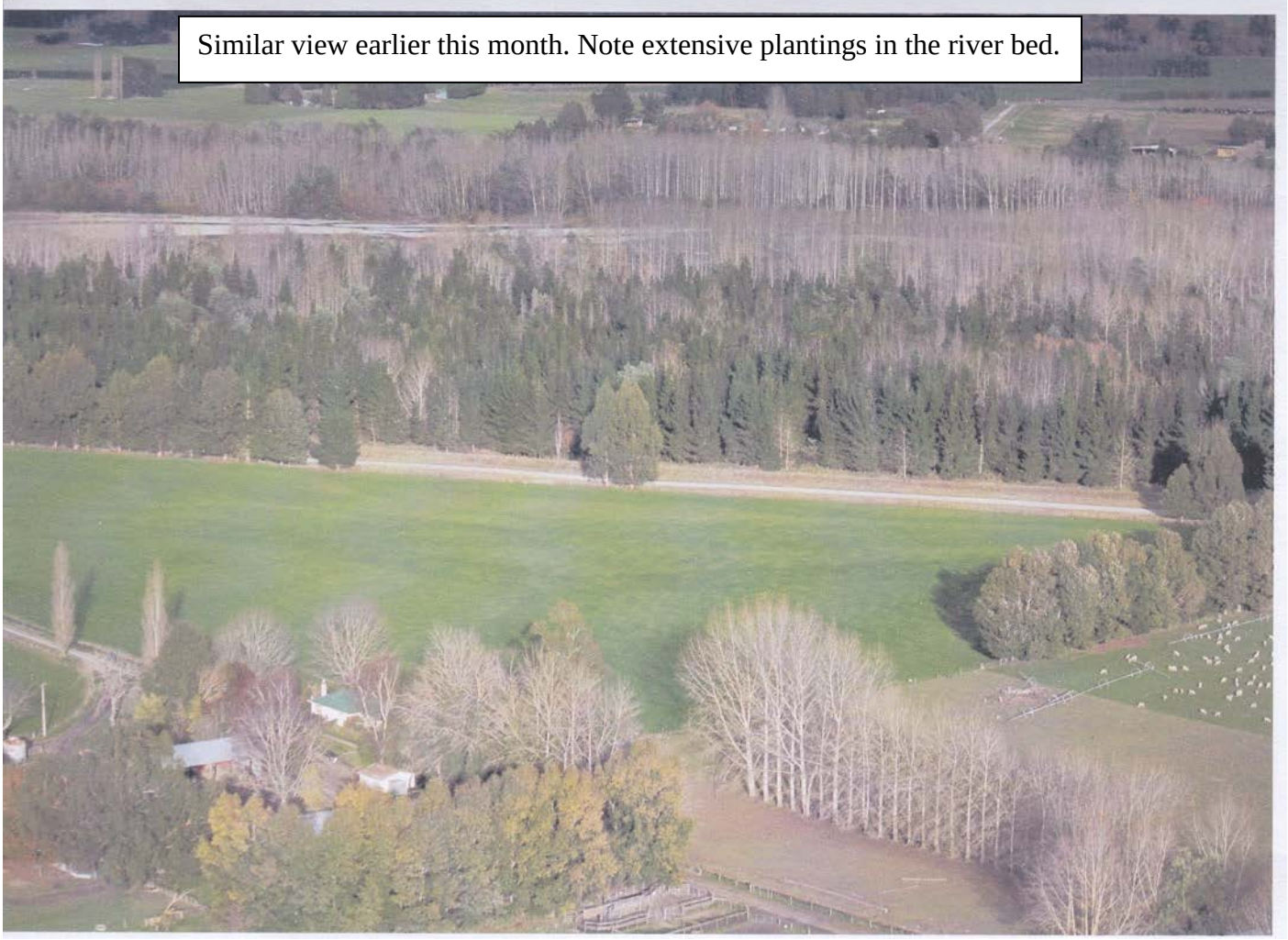
12. We have identified the need for an Irrigation Evaluation, Nutrient budget, willow removal, fencing and riparian planting around the springs. We are underway with a planting proposal under the guidance of Karen Miles and expect to apply for funding from ECan’s “Biodiversity Fund” and an Irrigation Evaluation and Nutrient budget will be completed within 12 months.

13. In my earlier evidence I referred to tree plantings in the Orari riverbed. I have photos here demonstrating what my point was from my original evidence

View over our house to the Orari river taken in 1980. Note sparse river bed plantings.



Similar view earlier this month. Note extensive plantings in the river bed.



14. Finally, all the available reports show the need for accurate reliable data to be collected before a long term solution is determined for the Upper Coopers Creek catchment. Applying 50l/s to consents in this Upper Coopers Creek is no acceptable. We have an interim flow regime within the notified plan that brings about equity and reliability of supply for water users that also provides improvements for Upper Coopers Creek catchment collectively. This will require a review of the consents to bring them into line with the plan.

15. In this light I support the steering group recommendations and the plan as notified.

Ian Kerse
17 June 2013