

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 GARY JOHNSTON

Dated: 10 November 2015

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INTRODUCTION

1. My name is Gary Johnston and I am Chairman of the Otaio Water User Group and a farmer in the catchment at Bonnyrigg Farm.

SCOPE OF EVIDENCE

2. My evidence will address the following:
 - 2.1 Otaio Water User Group;
 - 2.2 Bonnyrigg Farm.

Otaio Water User Group

3. The Otaio Water Users Group was first formed after the 1988/89 drought, chaired then by Alan Shields. The reason for forming the group at the time was to be able to collectively liaise with the Catchment Board / Regional Council of the day because they had pulled all our consents and demanded a round table meeting. Apparently the Council couldn't drive up the river due to farmers excavating channels right across the river bed in search of water.
4. Consents were reduced to more accurately reflect the amount of water needed for specific land parcels. The belief at the time was that reducing takes would keep the rivers flowing. A water sharing roster for the south side on and north side off, and vice versa, was trialled. This failed due to our clay based river and fast flowing topography.
5. The Otaio River we are told is the fastest flowing river in the Southern Hemisphere. Despite the reduced takes the water didn't behave as expected. The river continued to run dry as the water followed preconceived clay channels under the shingle. The group, along with Council approval, decided to self-manage which meant basically confirming our extraction points and using what limited water was

available for special needs (i.e. winter feed and finishing high quality crops).

6. This has worked well for all of us until approximately 12 years ago when two new consents were issued against OWUG wishes. We strenuously objected because of the water short catchment, but that's history. We are all neighbours and the two new consent holders are now part of our current water user group. Now we are told through this process that under the Land & Water Plan we require a minimum flow to be imposed and that we have far too much water allocated on paper which doesn't reconcile with the amount of water available.
7. Farmers have set their systems up to take our maximum rate of water when the river levels allow as consented. When the river drops to say 50% or even 30% often we become self-limiting, meaning we cannot physically take the volume required, without shutting down to allow recharge to start again. But we have managed to make this work successfully to date for our farming operations.
8. The group decided we needed professional help and so contracted Haidee McCabe of Irricon to assist us through this regulatory process. Since then many hours and dollars have been spent on trying to sort the issues. On Haidee's advice we have done two years of water quality testing and flow levels in the river with ECAN's joint assistance and expertise. We are so lucky to have done this work as we all find ourselves in the catchment, dry land and irrigated, having limits set for water quantity and quality.
9. We as a group have real concerns that the proposed nutrient limits will have significant negative economic effects on the majority of farmers. There has to be balance. Sure the target is the high emitters but who doesn't want to see the environment protected for future generations, but at what cost to future development. There has to be balance. If this process is fully implemented in its draft forms it appears far too heavy handed on the low emitters. I do recognise that the existing intensive developments need time to reduce and decrease loads while still making their businesses viable.

This plan must be simple for us farmers to understand as we are the ones who are meant to work within it. Most of us will give it our best shot, but the worry is the complexity of this and the ever changing Overseer versions.

10. We all accept the need to manage our effects on the environment. Farmers like myself consider ourselves to be stewards of the land. We want to ensure that it is sustained in the long term. Same with our water resource.
11. Over the last decade or so I have observed the significant increase in the complexity of the regulatory framework. The measures that farmers are compelled to adopt can add significantly to the cost side of their business. The consequence is that revenue must be increased just to maintain profitability. To do this we look to more intensive farming models. This in turn increases the water quality effects in some cases and so begins the problem again.
12. I think we need to be mindful that the proposed changes do not have such perverse outcomes. There is a real risk of this within Otaio if the right package of options is not obtained. The solution must be better than the status quo or it is really a futile exercise.
13. Since we involved Haidee McCabe we have had numerous meetings with Ecan staff, the Zone Committee, Fish & Game, DOC, local Iwi and the local community including dry-land farmers. The flow regime including minimum flow discussions with Ecan, Fish & Game and DOC staff have taken a lot of time. Our ideal situation would have been to have a minimum flow of 75l/s at the Otaio Gorge. A compromise was agreed to at 90 l/s with Fish and Game and DOC to provide for perceived instream values. Given the way the river operates I question whether the values in the lower catchment require the level of protection that is being afforded. I also wonder whether the proposed Plan will ultimately end up compromising those values more than status quo given the pressure it places on increasing productivity to offset increased costs.

Bonnyrigg Farm

14. Bonnyrigg Farm is 270 ha located between Bluecliffs Road and the Otaio River, by Grays Crossing
15. My father started irrigating in 1969 with hand shift pipes from a water hole next to the Otaio River. He managed to provide winter feed for all the farm stock that year in what was one of the iconic droughts in the catchment. However it was at the expense of the grain crops which failed.
16. In 1984 I came home and set about putting in a mainline to allow for more intensive irrigation. I shifted the water hole further away from the river and got electricity to the two pumps which supplied East and West halves of the farm for better efficiency. Consequently I was able to maintain our stock numbers and increase the cropping area. This suited the farm well as in most years the water available dropped steadily at the end of the season. Crops were finished and didn't require any more irrigation. We could typically take up to 60 l/s at the beginning of the season, but this would reduce by half by the end of the season. In some years a lot less than 30 l/s would be available as the river system dried up.
17. Simple logic was my father's view "If it doesn't run into the top of the river then it's only a short while before it doesn't run out the bottom".
18. In the drought of 1988/89 we nearly went off the farm with farm values plummeting. The cost of developing irrigation nearly sunk us. The next 10 years were exceptionally difficult as we had to fund replacement stock and cover the costs of the irrigation development. Hopefully the development we have done will see my sons in a better position.
19. Pivots have been added for efficiency about 8 years ago, and with water shortages being more frequent in recent years a deep well was commissioned to give us better reliability. The well was a good investment, especially last year, but it comes at a cost. Surface water

pumping costs once, but deep water has to first be brought to the surface and then pumped onto the land. That doesn't take account of the huge capital cost in setting up the deep well infrastructure, which 10 years ago cost in the order of \$100,000.. In our case we have had issues with sand over the years and have worn out two pumps since operating the well. Last season during a very dry year, this is the first time we needed to run at full capacity of 70l/s however our well was only able to provide 50 l/s at a constant rate. We are now having to look at options to overcome this going forward.

20. Last year we were still able to use some surface water all season, even a limited amount. It was quite a dry season with little river recharge but we managed water as a user group without a minimum flow. If the proposed 90 l/s at the Otaio Gorge cut off was in place, we would have lost one month of continuous irrigation. If however 75 l/s was imposed we would have only lost a few days. Regardless, we can't take water if it's not there but when it is there, quite frankly its needed.
21. A month without water in January, February or March would reduce our ability to provide a winter feed crop and in our case last year the last watering of our bean crop. This year the water table is already very low so we have told our grazer we can't take his 160 heifer calves as we can't see how we will have any water at all by the New Year. We won't need a minimum flow to stop irrigating, as the water simply will not be there. Dollar wise the lost grazing will do us out of \$6,000 a month. For our farm, this is a significant financial impact.
22. The shingle build up along the entire river precludes any sustainable fishery in my opinion. This was discussed at length during meetings with ECan and stakeholders. For 30 years we have managed our river and water takes and the invertebrate system is still doing well. Stopping us irrigating early won't meaningfully enhance the river in my opinion. I realise the Land & Water Plan requires us to have a minimum flow but there has to surely be something worth saving.

23. As a fisherman I'd love to be able to go down to my back paddock and catch a fish. Having lived here for 60 years it is a rarity to sight a fish even in a wet year. There survivability is even more dire in recent years as the shingle build up increases. This was discussed at length with ECan during the meetings of the Plan's development. The gravel build up in recent years has precluded the fishery and has led to what I would consider much less river flow and the deterioration of the lagoon. We do not seem to get the floods like we used to which cleared the gravels out and brings the river bed level down. Adjacent farm owners are also worried that the shingle build up will mean that the river cannot carry floods when they do occur.
24. The proposed minimum flow also brings up an anomaly for us, in how stock water takes are treated. We are not on a water scheme and aren't allowed now as there is no capacity within the scheme for more water. When we piped the farm for irrigation we used the water for stock reticulation allowing us to graze more cattle as opposed to sheep. Cattle drink a lot more and our old well systems were not able to provide enough constant water. We use a small pressure pump which keeps the irrigation pipes full all year round. My question is, will I be able to get stock water when there is no allocation and when the minimum flow is in place? During the Plan development process, it was my understanding that this was never part of the irrigation allocation process that we were discussing.
25. Not many farmers have applied the Overseer modelling to their farm so I thought I had better find out. I put my plan together and hired a professional to assess the farm under the early model. The result was 270ha of irrigated farm came back as a figure of 5kg/ha/yr of N, under Overseer version 6.1.1 and I thought that was OK, I'm fine. We have just had the new figures updated to work with Version 6.2 which now reads 11kg/ha/yr under Overseer version 6.2.2 – this is over double the N per hectare but nothing has changed on farm. It's a moving target – another update and perhaps we will no longer comply. This level of uncertainty is a significant issue for us. The uncertainty created by a regulatory framework that has a moving

target will inevitably affect or constrain the way that we invest in farm development and system upgrades.

Conclusion

26. OWUG was formed to collaboratively manage water shortage issues in Otaio. It has continued to do so since its inception.
27. The proposed minimum flow will significantly compromise irrigation reliability relative to status quo. Given the nature of the operations there is very little wiggle room to absorb this.
28. Through Plan change development OWUG worked with ECan to put together a package of options that would help mitigate the effects of the minimum flow. That package is finely balanced and does not come without significant cost implications both in terms of capital cost, but also increased operational costs.
29. From a nutrient point of view we just ask that the system be made clear and certain. Farmers need to be able to operate in a regulatory environment that provides clarity and certainty so that they can plan and make investment decisions with long term in mind. A regime that changes their status at the drop of a hat will only stifle investment and innovation.

Gary Johnston
OWUG Chairman

10 November 2015