

IN THE MATTER of the Resource Management Act 1991
AND
IN THE MATTER of the hearing of submissions on the
Proposed Canterbury Land and Water
Regional Plan

BY **WAITAKI IRRIGATORS COLLECTIVE
LIMITED**
Submitters

TO **THE CANTERBURY REGIONAL
COUNCIL**
Local authority

**BRIEF OF EVIDENCE OF ELIZABETH JANET CASWELL SOAL ON BEHALF OF
WAITAKI IRRIGATORS COLLECTIVE LIMITED**

Dated: 20 June 2013

Introduction

1. My name is Elizabeth Soal and I am the Policy Manager for the Waitaki Irrigators Collective Limited ("WIC").
2. The Collective has submitted and made further submissions on a number of points in relation to the proposed Canterbury Land and Water Regional Plan ("pLWRP"),
3. WIC is part of the larger Primary Sector Policy Group, which has submitted and presented evidence earlier at these hearings. WIC supports the evidence provided by the group, namely Doctors Roberts and Edemeades; Messrs Callander, McIndoe, and Curtis; and Ms Hayward. I will not be repeating the points of evidence they have spoken on.
4. As regards to water allocation and the setting of sub-regional limits, WIC is keen to work with the Lower Waitaki-South Coastal Zone Committee as it has commenced a process to amend the Waitaki Catchment Water Allocation Regional Plan, and has commenced the limits-setting process for both the South Canterbury-Coastal Streams area and the Upper and Lower Waitaki Zones. Therefore, this evidence will not traverse some of the region-wide planning rules, as there will be rules and limits imposed in the Waitaki prior to the region-wide rules and limits coming into effect.

Background

5. WIC represents the vast majority of irrigators in the lower Waitaki River catchment. WIC is made up of five irrigation schemes and a society of individual farmer irrigators who use water from Lake Waitaki, the lower Waitaki River, its tributaries or connected groundwater to irrigate land between the Waitaki Dam and the coast. Overall, the Collective represents over 580 farmer irrigators. Together, the WIC's members represent an irrigated area of around 75,000 hectares across North Otago and South Canterbury, and this equates to around 12 per cent of irrigated farmland in New Zealand.
6. As the area is one of the most drought-prone in the country, irrigation is of vital importance to economic and social development of our district. Irrigation commenced in the lower Waitaki catchment at the start of the twentieth century. Lincoln University's River Values Assessment report considers the Waitaki to be the most significant river in Canterbury for irrigation values¹.
7. With irrigation, the land is extremely productive. WIC has a significant role in helping Canterbury achieve its development goals. The Collective's members provide over \$550 million in gross income to the regional and national economies, and represents land and infrastructure value in excess of \$2 billion.
8. Irrigation developments which are consented but not yet operational for the lower Waitaki Catchment will have the potential to increase the irrigable command area

¹ Hughey, K.F.D., Baker, M-A. (eds). (2010) *The River Values Assessment System: Volume 2: Application to cultural, production and environmental values*. LEaP Report No. 24B, Lincoln University.

using water from the lower Waitaki River and its tributaries to around 135,000 hectares, which will bring the contribution of irrigation to the regional economy to close to one billion dollars annually.

9. Reliability of supply is crucial to ensuring that this economic input, and flow-on social benefits, into the region continue. The Regional Policy Statement for Canterbury (CRPS) has recognised that community irrigation schemes, of which the Collective represents five, are regionally significant infrastructure. The Canterbury Water Management Strategy (CWMS) also recognises the importance of irrigation to the region, for example by having a target of there being a substantial increase in the area of land under irrigation.
10. The irrigation schemes and individual irrigators which WIC represents are reliant on water from the Waitaki River, the release of which is controlled by way of resource consents operated by the upstream energy companies, Meridian Energy Limited (MEL) and Genesis Energy Limited.

Sensitive sites

11. Under the Natural Resources Regional Plan (NRRP), the entire length of the lower Waitaki River from the Waitaki Dam to the State Highway One bridge, and the majority of the Hakataramea River were designated to be a sensitive area for salmon spawning. This was done so on the basis of the report the *Assessment of Significant Salmon Spawning Sites in the Canterbury* region prepared by MJ Unwin, of NIWA (Report No. U06/59). The report considers the Lower Waitaki River to be nationally significant in terms of salmon spawning, and notes that this applies to the whole of the Waitaki mainstem. This designation has been carried over into the pLWRP.
12. WIC is not disputing the importance of the Lower Waitaki and the Hakataramea Rivers to salmon angling. However, the designation of the entire length of the Lower River means that farmers along approximately 130 kilometres of river frontage cannot, without a resource consent:
 - install, extend, use, maintain or remove bridges or culverts (Rule 5.115)²;
 - carry out work in relation to temporary structures or diversions (that are otherwise compliant with relevant rules) (Rule 5.118);
 - allow temporary discharges to water or land that re otherwise compliant (Rule 5.119);
 - extract gravel (Rule 5.125);
 - introduce or plant any plat, or remove and disturb existing vegetation in, on, or under the river bed (Rule 5.143)³;
 - clear vegetation adjacent⁴ to the river bank (Rule 5.147);
 - use land for earthworks or cultivation adjacent⁵ to the river bank (Rule 5.148).

² s42A Officers' Report amends with the following: "other than the maintenance of a structure outside the spawning season and the use of a structure."

³ Although it is noted that the s42A Officers' recommendations go some way to addressing this matter.

⁴ As recommended by s42A Officers' Report.

13. Policy 4.26 (even with the amendments recommended by the s42A Officers' Report) means that all stock (including sheep) must be excluded from sensitive sites (see the discussion of the effectiveness of sheep grazing, below).
14. At first glance, these rules in isolation do not seem particularly onerous. However, it must be remembered that the Waitaki River is braided, dynamic, and its flow is completely managed through the use of the upstream hydroelectric infrastructure. Regardless of the continual flood protection and channel management work jointly managed by Environment Canterbury and the Otago Regional Council (including weed spraying, layering channels and bulldozing channels) significant amounts of freehold land have been lost as river braids shift and cut into the banks during high flows.
15. It is impractical (and at times impossible) to permanently fence a river like the Waitaki and in some areas this has to be achieved through electric fencing. Permanent fences can be erected and then washed out in times of flood or sustained high flows, which can lead to the loss of productive land and infrastructure.
16. The following figures illustrate the dynamic nature of the Waitaki River. The first three images show the Lower Waitaki River flowing on 10 March 2011. Approximately five hectares of productive land was lost to the River after a period of high flows for approximately three months. On the day the photos were taken, the river bank was literally falling away before our feet.
17. The officially recorded flow for the River on the day in question was 452.8 cumecs. The average for the year to that day was 726.8 cumecs, with flood flows of 1,703.5 cumecs recorded on 1 January, and 1,428.6 cumecs on 8 February. There had been willow planting in place for a number of years to stabilise the bank, but this was washed away in the high flows. The red line indicates the previous location of the river bank. The relentless destruction of the land was only controlled through the use of a digger clearing a new channel in the middle of the River fairway.
18. These sustained high flows also destroyed the intake and headrace structures of the Maerewhenua District Water Resource Company irrigation scheme, which required replacement at a cost of around \$800,000.

⁵ As recommended by s42A Officers' Report.

Figure 1: South Bank of the Waitaki River near Duntroon, looking North, 10 March 2011



Figure 2: South Bank of the Waitaki River near Duntroon, looking Northwest, 10 March 2011



Figure 3: South Bank of the Waitaki River, near Duntroon, looking Northeast, 10 March 2011



19. Figure 4, below, illustrates the stony nature of soils on the banks of the river, and the practical difficulties of maintaining fencing and so forth on the banks of a dynamic, braided river. River flows peaked in January of this year at over 1200 cumecs, with high flows up to 700 cumecs continuing into March. A significant amount of productive land was also lost at this site due to the movement of the River in sustained high flows.

Figure 4: North Bank of Waitaki River, near Ikawai, looking East, 15 March 2013



20. It is WIC's submission that the rules as written are particularly problematic for farmers with river frontage on the Lower Waitaki and the rules as drafted would have some unintended consequences, such as preventing clearance of weeds, or allowing cultivation on productive farmland to occur only if a resource consent has been obtained. Farmers must be able to respond to the forces of the river at short notice.
21. Therefore, WIC submits that it would be more appropriate for the Lower Waitaki-South Coastal Zone Committee to undertake a review of the classification of the Lower Waitaki and Hakataramea Rivers as sensitive sites as part of the limits-setting process, and subsequently provide for a further Schedule or amendment to Schedule 17. It may be appropriate for there to be particular areas within the Rivers to be classified as sensitive, or the Committee could recommend to the Council that rules relating to the use of land adjoining the river could be developed and included in the sub-regional Chapter for the Waitaki in the pLWRP.

Definition of intensively farmed stock

22. WIC is supportive of the change in definition of intensively farmed stock as recommended in the s42A Officers' Report.
23. The use of irrigation combined with sheep grazing is generally not considered to be an intensive farming activity, and including sheep within the definition as originally drafted leads to undue restrictions on land use (or requires significant investment in

erecting fencing) for a relatively minor effect of sheep grazing. Sheep are a very good tool for controlling vegetation including noxious weed growth, whilst allowing access to the waterbody for people such as anglers.

Protection of the Waitaki Hydro Scheme as submitted by Meridian Energy Limited

24. As per WIC's further submission, we are opposed to the changes sought by MEL which seek the inclusion of a suite of policies and rules to provide for greater "recognition" of the "critical" hydro-electric Waitaki power scheme.
25. Although the Waitaki hydro-electricity scheme is of course very important in meeting the energy demands of the country (and meeting them in a renewable manner), the amendments as sought will have major implications for other water users downstream of the scheme, and those within the catchment of the scheme infrastructure.
26. Entrenching the position of the Waitaki hydro-electricity scheme within the pLWRP will mean the future authority of decision-makers on matters relating to the taking and use of water in the Waitaki will be fettered in way which should not be permitted.
27. The issues relating to water allocation on the lower Waitaki have a history of being drawn out, controversial and litigious. With the development of the Waitaki Catchment Water Allocation Regional Plan (WCWARP), it was hoped that the competing tensions would be resolved, and an allocation regime be established which the community at large could have faith in. There was a robust process behind the Plan and it met the needs of current and future generations and the Plan balanced competing interests and allocated water to those various uses accordingly.
28. However, many important aspects of the WCWARP as they related to the Lower Waitaki River were not able to be activated, as there were a number of resource consents in place which prevented the flow regime envisaged in the WCWARP occurring until those consents were able to be reviewed or they expired. Importantly, this included the consent for the operation of the Waitaki Dam and as a consequence affected Rule 7 of the WCWARP (which compelled the Dam consent holder to release certain flows during certain months of the year in order to meet the requirements of downstream abstractive users).
29. Despite these issues around certain parts of the WCWARP being unresolved, there have been a number of water permit applications decided which move the current consenting environment further from that originally contemplated by the Plan.
30. The Lower Waitaki-South Coastal Zone Committee has recommended that Environment Canterbury undertake a process to amend the WCWARP in order to resolve these issues relating to its operation. WIC (and MEL) are committed to this process.

31. The balances which the Allocation Plan (and in fact the Resource Management Act, the Canterbury Water Management Strategy, the Regional Policy Statement and the pLWRP) sought to strike were between a variety of competing uses – industrial, recreational, environmental, tangata whenua values and so on. It is submitted that the submissions of MEL to which I will specifically turn to shortly, seek to upset this balance.
32. In the evidence provided to the Commissioners by Ms Sarah Dawson on behalf of MEL, she states that the Waitaki Power Scheme "is recognised and afforded national and regional significance by the NPSREG and CRPS, in recognition of its economic, social and environmental benefits (paragraph 12). Ms Dawson goes on to state that "a new strategic level policy which recognises existing hydro-electricity generation as a nationally significant user of freshwater and provides that water will be managed to ensure reliable water is available to provide for the continued operation of these schemes and their benefits" (paragraph 19.2).
33. With all due respect to Ms Dawson, I do not consider that the CRPS elevates the Waitaki hydro power scheme to the level of significance she asserts. Although the explanation section of issue 7.1.4 does state that the scheme is "nationally significant", this is not then translated (directly or indirectly) into any policies, objectives, or methods in the Statement. Therefore, elevating the status of the Waitaki hydro scheme through the development of new policies and rules in the pLWRP is not necessary in order to ensure consistency with the CRPS.
34. MEL have stated in their evidence (for example, paragraph 16 of Ms Dawson's evidence) that the pLWRP does not give sufficient and appropriate effect to the provisions of the National Policy Statement for Renewable Electricity Generation 2011 (NPSREG). The preamble to the NPSREG states: "this National Policy Statement does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address." WIC would argue that the policy and rule changes sought by MEL are in effect attempting to tie the hands of decision-makers in relation to water allocation.
35. The s42A Officers' Report states at page 378 that "Meridian requests a set of additional rules relating solely to the consenting and reconsenting related to the Waitaki Hydro-electric Power Scheme. It is considered this would unnecessarily complicate the pLWRP and that the existing provisions cover the situation. It is also noted that Meridian holds a full range of resource consents for their Waitaki Operation which it is understood do not expire for at least another ten years and the operation is also subject to the WCWARP". At page 379 "additional policies or a topic area is not required...the NPSREG is given effect to an applicable extent." WIC supports this position, and encourages the Commissioners to do the same.
36. Through the CRPS hearing process, MEL sought similar recognition of the Waitaki hydro-electric scheme as they have done here. In that instance, the Hearing Commissioners found that such recognition of hydro-electric infrastructure as sought by MEL (and others) would "add prolixity and repetition that would obscure the intent

of the document. Any resource management benefit of doing so is elusive" (page 19).

37. In WIC's original submission, we raised our concerns as to the elevation of ZIP outcomes into the formal planning framework. I note that MEL have requested the deletion of, or an amendment to, Policy 4.4 in order to allow catchment-level assessment of priority outcomes to replace the regional-level priority orders. MEL asserts that the Waitaki hydro-scheme would be afforded higher level priority than other uses in the Waitaki, which would include irrigation.
38. Objective 2 of the WCWARP states that, inter alia, hydro-electricity generation and agricultural and horticultural activities should both be provided for, with the Plan specifically not placing priority for one type of activity over another.
39. The larger Waitaki catchment is divided into two Zones, the Upper and Lower-South Coastal. It would be concerning for WIC if the priority afforded to hydro-electricity was able to be elevated in the Upper Zone which would then have significant implications for water allocation in the Lower Zone. This would also be contrary to the 'mountains to the sea' approach which has been emphasised during the Zone work programme developments. We therefore oppose MEL's submission in this regard.
40. The very size and scale of the Waitaki hydro-electric scheme means that the continued operation of it will always be considered in any planning decisions in the future – it hardly needs the extra protection sought by MEL. These factors will rightly be considered through the resource consent application process, as discussed in the s42A Officers' Report (see above).
41. Arguably, the inclusion of such policies and rules that MEL are proposing would undermine the processes being implemented under the CWMS and how the salient parts of the WCWARP can be implemented in the future, such as Rule 7 which as I mentioned earlier provides that the Waitaki Dam consent holder release flows at certain times of the year to recognise the requirements of downstream users.
42. The priority MEL is seeking could potentially make its consent renewal process for the Waitaki hydro-electric scheme much simpler, whereas consent renewals for other river users could become much more difficult. This could contradict important parts of the WCWARP, including the decision-making process for future potential abstractive users.

Definition of the irrigation season

43. WIC is opposed to the wording of Policy 4.67 which allows for winter abstraction of water to storage, and that abstraction for other irrigation purposes is to be contained to a defined irrigation season of October to April.
44. WIC submits that the definition of an irrigation season in such a way is arbitrary and does not serve a useful purpose. Water for well-managed irrigation should be

available when the climatic and soil conditions warrant it. Volumetric allocations attached to water permit conditions already place a limit on how much water can be used across the year, therefore the definition of an irrigation season is unwarranted.

45. In some areas, such as the Waitaki Valley, irrigation water is used as a very effective frost-fighting mechanism in the viticulture and horticulture industries, and is particularly important for protecting vulnerable fruit during late frost events during spring.
46. Another example is that farmland in the Hakataramea Valley is highly susceptible to wind-blown erosion. Irrigation increases and improves soil health and stability. It is imperative that the soil moisture content in late winter/early spring be increased in order to minimise soil losses through wind-blown erosion. Water for irrigation from the Hakataramea River is highly unreliable and often unavailable in the summer months, and therefore it is critical that available water can be used in, say, August when river flows are high due to freshes and snowfall melt in the upper catchment but there is a soil moisture deficit in the lower catchment. Limiting the irrigation season to October-April would, in this case, lead to a significant reduction in reliability of supply and result in increased erosion, which would, in turn, have adverse effects on water quality.
47. Rule 7 of the WCWARP recognises the necessity of flexibility in relation to this matter, by allowing for abstraction for activities (including agricultural and horticultural activities) throughout the entire year (with different amounts allowed for abstraction depending on the month):


| Month | Flows to be provided above the minimum flow (in m ³ /s) |
|---------------------|--|
| October to March | 80 |
| April and September | 50 |
| May and August | 20 |
| June and July | 10 |

48. It is noted that the s42A Officers' recommendation is that individual water permits can define a period of water use outside of the defined irrigation season, and this policy does not preclude this. If it is the intent of the Council that such conditions on water permits, then it is unclear what the purpose of such a policy is. The appropriate use of water for irrigation should be determined on the conditions prevalent in the area, rather than a blanket policy as proposed.

Conclusion

49. WIC welcomes the collaborative processes being developed by Environment Canterbury in relation to water management, and in particular the development of the Zone Committees as effective mechanisms for resolving complex issues at the catchment level. We look forward to continuing to work with Environment Canterbury on these matters in the future.

Dated: 20 June 2013



Elizabeth Soal