

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of applications by the Ashburton Community Water Trust for water, discharge and land-use permits to construct an intake, settling pond, and canal system to enable the taking of water for hydro-electricity, to construct hydro generation facilities and hydro generation power station and to undertake earthworks and clear vegetation associated with the above construction works in the riparian margin of the Rakaia River.

**SUBMISSION ON BEHALF OF THE MALVERN HILLS PROTECTION SOCIETY  
and SIX INDIVIDUAL SUBMITTERS**

**Introduction**

1. This submission is made on behalf of the Malvern Hills Protection Society Incorporated (“the Society”) and six individuals, who are also members of the Society. They are: Colin Morris, Liz Weir, Jules Snoyink, Rosalie Snoyink, Garth Brookland and Tim Wardell.
2. The Rakaia is a regionally, nationally and internationally significant river, important for its outstanding landscape, ecological and amenity values. It is the largest braided river in NZ and is an outstanding wildlife corridor from the mountains to the sea.
3. Effects on the landscapes, the ecology and on the recreational amenity values of the Rakaia River are important to the Society’s members. The Society is opposed to the proposed Rakaia Terrace Hydro Scheme because of the adverse effects on the river, the landscapes and ecological and amenity values.
4. The Society’s evidence will focus on the effects of the take and construction of the proposed hydro scheme. We will present our concerns about the back flooding or ‘ponding’ that is already occurring at the Rakaia River mouth. We will also call Bill Southward, a resident of the Rakaia Huts settlement to give evidence on the ponding issue and Tim Wardell. We have attached a letter from Garth Brookland who will be available at the Hearing to answer any questions in relation to the effects on the Rakaia’s recreational, amenity and landscape values. (Garth Brookland letter Appendix 1.)

5. The Society adopts the evidence of Fish and Game, the Royal Forest and Bird Society, the Dept of Conservation and NZ Salmon Anglers on the adverse ecological, landscape and recreational amenity effects on the Rakaia River.

## **Background**

6. In December 2001, the Christchurch City Council, Selwyn District Council and the Ashburton Community Water Trust jointly applied for resource consents for takes from the Waimakariri and Rakaia rivers. The applications included two takes of up to 40 cumecs from the Rakaia River for *irrigation and water enhancement*.
7. We find it difficult to accept at this late stage in the proceedings, that the applicant can change the scope of its scheme to a hydro scheme. It is also unacceptable to the Society that this new project is now being heard as part of the Joint Hearing with CPWT & CPWL. Our original submissions to Ecan on the water takes were written with the view that the takes from the Rakaia would be for an irrigation scheme on both the north and south sides of the river. We can find no consents in the present ACWT applications that relate to the use of water for irrigation purposes.
8. It was not until 4 July 2007 when the ACWT applications were notified, that the Society first learned of the hydro scheme. We heard nothing further about the ACWT scheme until after one month into the CPW Hearing, we were advised that the ACWT applications would be “tacked on” to the end of the CPW Hearing. This has created a huge amount of additional work for submitters already overwhelmed by the CPW Trust and CPWLtd applications.

## **Lack of information**

9. The Society is alarmed at the lack of community awareness in relation to the proposed hydro scheme on the Rakaia River. Public consultation may have occurred on the south side of the river but after having contacted several people who fish, jet-boat and live on or near the north bank of the river, we discovered that very few people are even aware of the proposed hydro scheme. Their reaction was “How can it happen that a project of this scale can get to a hearing without open public discussion? ”

10. The commissioners must be wondering why so few submissions have been received on what could potentially be a scheme of such huge impact on one of New Zealand's iconic rivers.
11. The Society disagrees with Ms Appleyard when she stated in Para 62 of the ACWT legal submission (23/4/08) that *"Tellingly the subsequent notification of the use application attracted a relatively small number of submissions. This indicates less concern about the effects of the proposal once the use of the water was understood than vice versa and indicates the strength of the submission that it cannot be argued that somehow the application has changed significantly in terms of the scale of effects"*. This statement is disingenuous and the Society believes the reverse to be true, that the small number of submissions was a result of a complete lack of knowledge of the proposal.
12. The fact that there were only 18 submitters to these hydro resource consent applications, reflects the poor level of public understanding of what is being proposed for the river. The society believes that an absence of public information and obfuscation has resulted in the low number of submissions.
13. If the Society's submission and the four separate submissions made by some of its members are subtracted, this leaves only 13 submitters from the whole of Canterbury, and indeed NZ, who submitted on such a significant proposal. How can good decisions be made on resource management when so few of the key stakeholders i.e. the general public, have participated in the process?
14. Murray MacDonald lives at the Mt Hutt Lodge in the Rakaia Gorge and has operated a jet-boat tourist business on the Rakaia River for the last 20 years. When he was told about the hydro proposal (Thursday 4 September 2008), he replied "Really. I live here and I've heard absolutely nothing about the scheme, why hasn't it been in the newspapers?"
15. The Society contacted Phil Deans and Dave Denton, well known local fishermen who regularly boat and fish the Rakaia River. They were also unaware of the hydro proposal. The letter from Garth Brookland also indicates his confusion about the ACWT applications. This lack of awareness in such key stakeholders is indicative of the widespread ignorance of this hydro scheme.

16. We strongly dispute Mr Dunning's Planning evidence in Para 5.1 that.... *Both suites of applications have been afforded relatively high profiles through the media, which has in some ways enhanced the "reach" of consultation undertaken, and in particular the degree of community awareness.*
17. CPW's application to take water, notified in June 2006, did receive a high profile in the media, but to our knowledge there was no mention of the ACWT hydro scheme. It appears to us that all media coverage at the time was silent on the ACWT applications. The Press (13 June 2006) reported the land use consents lodged with Ecan but made no mention of the ACWT consents.
18. The first mention of a proposed hydro scheme appeared when the ACWT application to use the water for hydro generation purposes, was notified in July 2007. The Society's main focus at that time was on the CPW Hearing, which we expected would begin any time. The size and complexity of the CPW scheme demanded a great deal of time, energy and resources of submitters. The Society would have missed the ACWT hydro scheme consent application, had it not been for a vigilant Press reader who informed the Society. It's not surprising that few submitted on the Rakaia Terrace Hydro scheme.
19. The current 'dual' CPW/ACWT hearing situation provides submitters with little time to prepare and present sound evidence for this application. This hardly seems 'fair or appropriate'.

### **The ACWT Water Take application**

20. The Society believes the take of 40 cumecs from the Rakaia (and diversion of 42 cumecs) will have an adverse effect on the river. As with the CPW application, we oppose the taking of 40 cumecs from the Rakaia, whether it flows to the south or north bank of the river, on the grounds that it is the last remaining water to be allocated and that the take is not sustainable management of Rakaia River water.
21. The Society fails to see how granting consents for all of the last allocatable water in the Rakaia will reasonably meet the needs of future generations. Future schemes which may offer more efficient, sustainable and equitable uses of the water, would have no opportunity to put their proposals into practice as there would be no water left for alternative uses.

22. We repeat Para 20 of the Society's opening legal submission by John Burns.  
*The Rakaia River National Water Conservation Order does not provide a licence to take as much water as can be taken, and for whatever purpose an applicant chooses, as long as the minimum flows in them are maintained. Any water take proposal has to meet the sustainability test in the Act.*
23. When the Rakaia River NWCO was drafted, was it envisaged that all of the water to be allocated would be taken up and taken at the same time? There is already much uncertainty as to the current cumulative effects of abstraction from the Rakaia River. There is some doubt about exactly how much water is available to allocate? We will address these issues later in this submission.
24. The ACWT proposes to take water from the area known as Happy Valley. This intake is almost opposite the CPW diversion channel on the north bank or true left of the Rakaia. The construction of two intakes and diversion channels on opposite sides of the river will have a more than minor effect.
25. No diversion channel for the intake structure is shown in the ACWT photo simulations. The proposed intake is shown on the bank of the river. Historically the water has flowed to this bank, but will the braids change in future and thus require the diversion of water to this intake? The Rivers' Assessment evidence to the CPW Hearing, by Di Lucas for Ecan, indicates the 2007 braid pattern flowing away from the bank at that point, which we understand is the intake location. The Society will present recent photos that show a minor braid flowing along the intake location and the main braid further out in the river.
26. There is little information in the AEE on the need for river training or heavy machinery in the riverbed.
27. Both diversion channels will be visible from the public viewing area at the top of the Rakaia Gorge cutting. At present there are few man made structures visible in the riverbed at this point. The Highbank power station is visible from this location and on occasions the pylons that cross the river.
28. What will the intake structure, which is 30m wide, and 60m in total with wing walls, look like from the river and from the public viewing area at the Gorge? There appear to be no photo simulations showing the altered riverbed, the structures and the modified terrace.

29. We have not been able to ascertain what view people (or visually sensitive receivers, VSR's) who access the Rakaia at Steele's and Sleeman's Road, will see across the river to the hydro proposal on the south bank, as no clear photo simulations are available. Will the three power stations within the canal be visible from the true left of the river and what will the Barrhill Power Station, 20ms high at the foot of the Upper Terrace, look like from the riverbed and terraces on the north bank?
30. There is little information in the AEE about the scale of the earthworks. What will the Terrace canal look like? We agree with the ADC Officer's report that *the earthworks associated with the Terrace Canal are significant (pg 8), in particular the cut between CH4250 and 5250 to avoid the active riverbed and the cut to enable the construction of the canal up the terrace face and the head pond. Pg 39 states the terrain involved is quite steep and the amount of earthworks involved on the various escarpment slopes is considerable.*
31. The building of large scale structures in the bed and on the banks of the Rakaia, i.e. intakes, canals, settling ponds, fish screens, hydro generating structures and power stations will destroy the river's natural landscape characteristics.
32. The Society objects to the working of heavy machinery in the bed of the river at both intake sites (CPW and ACWT) and possibly working at the same time. This would also be visible from the public viewing area at the Rakaia Gorge and an appalling prospect for those of us who appreciate and enjoy the grandeur of the landscape in this area. Untold overseas visitors choose to travel the Inland Scenic highway and stop at this lookout to experience unsullied natural views, which the Rakaia currently offers.
33. We have always understood that the Rakaia River NCWO would protect the river from such large-scale projects as the Rakaia Hydro scheme, and we consider this project as an inappropriate development for this outstanding natural landscape.

### **Birdlife on the Rakaia**

34. The Rakaia is a significant habitat for braided river birds especially the endemic species i.e. wrybill, black fronted tern, black-billed gulls and banded dotterel. To avoid repetition we will rely on the evidence of Department of Conservation and the Royal Forest and Bird Society. We wish to emphasise though, that large scale construction, major earth works and heavy machinery

working in the river beds and on the banks, especially at times when the birds are breeding will have an adverse effect. The area of construction is over 14 kilometres; this is not a small area of the riverbed.

### **Terrestrial ecology**

35. The Society acknowledges, as does the applicant, the weed and exotic tree species already present in the riverbed and on the banks of the river, but we think little or no account has been taken of the 'big picture' landscape. This area is one of the most valued landscapes by people, not only in NZ, but also by the many tourists from around the world, who visit the area.
36. While most of the indigenous vegetation has been removed from the Canterbury plains, the riverbeds are now the last remaining areas of indigenous plant bio diversity. The Waimakariri and Rakaia rivers are the last remaining wild places on the modified Canterbury plains.
37. We are concerned that the construction of the scheme will result in the further loss of indigenous vegetation, in particular kowhai/grey shrub lands on the terrace escarpment, kowhai trees and remnant patches of smaller native species. We can find no evidence that the applicant has carried out a full survey of native vegetation on the affected land.
38. We are also concerned that sustained lower flows in the river will cause the proliferation and spread of weeds in both the riverbed and on its banks.

### **Effects on recreational amenities**

39. **The National Water Conservation (Rakaia River) Order 1988**  
**3. Outstanding characteristics and features** – *It is hereby declared that the Rakaia River and its tributaries include and provide for*  
*(a) – An outstanding natural characteristic in the form of a braided river.*  
*(b) – Outstanding wildlife habitat above and below the Rakaia River Gorge, outstanding fisheries, and outstanding recreational, angling, and jet boating features.*
40. We will rely on the evidence of Fish and Game and NZ Salmon Anglers with respect to the fisheries, except to say that some members of the Society, who have long fished the Rakaia River, have grave concerns for the survival of the salmon fishery if consents are granted.

41. If the flow in the Rakaia is reduced by up to 57 cumecs, water temperatures will rise; the salmon will shoal in pools waiting for higher flows, and will be fished out. The area where the water is to be taken for both schemes is easily accessed by jet boats from the gorge bridge and is a well-used section of the river for boating and fishing.
42. The evidence presented by Davor Bejakovich for Fish and Game to the CPW Hearing gives us no assurance that present day fish screens designs actually work in protecting salmon and trout, let alone the smaller indigenous fish species.

### **Jet Boating**

43. We believe the large-scale diversion of water at opposite locations in the river, would adversely effect jet boating on that particular stretch of the river. With the possible diversion of 59 cumecs (42 cumecs ACWT/CPWT and 17cumecs Barrhill/Chertsey), the reduction in the remaining braids may make it difficult and dangerous for jet boats.
44. Novice jet boaters may choose the narrower deeper diversion channels in preference to the remaining reduced braids flowing across the central section of the river. At the best of times this is a tricky section of the Rakaia (even for experienced jet-boaters) given the width of the riverbed and the many smaller braids. At this point the river is about a kilometre wide. Further down river the width expands to 2 kilometres making it even more difficult for jet boaters at times of lower flows.
45. Jet boating and salmon fishing occur mostly in summer and coincide with the irrigation season and lower flows in the river. The hydro scheme will return the water to the river at a point approximately 15 kms downstream. We understand however, that the applicant has not ruled out the possibility of an irrigation scheme some time in the future. This is likely to be a run of river scheme, which would result in even further stress on the river during the irrigation season when flows are low.
46. The Society is disappointed that there are no submissions from the Jet Boating Assns who represent large numbers of jet boaters using the Rakaia River. Brief discussion with jet boaters revealed that they were unaware of the hydro scheme and therefore didn't make submissions.

### **Access**

47. We understand that three bridges will be built to provide public access to the riverbed. As the length of the canal system is approximately 14 km, we believe this would greatly reduce public access. We rely on the evidence of Fish and Game and NZ Salmon Anglers for further evidence in this respect.

### **Mitigation measures**

48. The Society is not convinced that the applicant's suggested mitigation for screening structures with indigenous vegetation will work. It would be a difficult, expensive and a long-term exercise to establish indigenous vegetation in an area which is often hot, dry and dusty in summer. We agree with the ADC Officer's Report that *the adverse effects on natural character will be more than minor regardless of mitigation plantings.*

49. The Society does not wish to see adverse effects managed by way of Management Plans as intended by the applicant. More detail needs to be provided to this Hearing so that the adverse effects can be accurately assessed.

### **Ponding at the Rakaia River mouth**

#### **Background**

50. About a year ago, Mr Bill Southward contacted the Society with his concerns about the ponding of river water at the Rakaia River mouth. Members of the Society have visited the area on three occasions since and confirm that there are questions that need to be answered on why the ponding is occurring.

51. Bill Southward is a resident of the Little Rakaia Huts, the settlement on the north side of the Rakaia River mouth. His family has owned a property there for over 50 years. Bill eventually replaced the family bach with a permanent home and has resided there for the last 14 years. He has fished and boated the Rakaia for most of his 64 years.

#### **Ponding**

52. In times of low river flows the sea restricts the mouth opening and the water then backs up through the lagoon, flooding farmland and the back sections of some residences. This ponding is a recent phenomenon at the Rakaia River mouth, occurring more regularly during the last five years. Ponding has occurred infrequently in the past; it is now happening every year.

53. The shingle bank between the lagoon and the sea is the sole means of protection for the homes and boat ramp at Little Rakaia Huts. The shingle bank has changed considerably over the past 5 years being much lower and approximately half the width as it has been historically. The bank is now composed of much smaller stones and small grit with long stretches of sand. With high seas, the waves are continuously pounding over the lower shingle bank and into the lagoon. The foreshore in the lagoon is now being badly eroded.

#### **Lower river flows at the mouth**

54. Quotes from Bill Southward... *'What I and others are noticing is that there is a lot less water going out the river mouth. When we go up the river, - and remember we have been doing this for 50 years - we see and feel the changes year by year. We have walked and boated the river thousands of times. You now see people driving their 4WD's from one side of the river to the other. You can even wade from one side to the other. This would have been impossible years ago.'*

55. *'No matter what the flow in the river, the shingle bed is always moving. You fish a hole one weekend only to find the next weekend it is filled in with shingle, or the water has moved away to a large degree. As fish move upstream, we try and follow a run right up to and through the Rakaia Gorge. When we return back to the mouth of the river, we just know there is a lot less water or when we travel upstream to Willow Island; about 4kms from the mouth (20 minutes by boat) in summer time, it is now hard to boat. I believe this is where the river will eventually run dry. We keep hearing that "all the water that goes out to sea is being wasted", but this water brings the shingle, which protects our foreshores and homes.'*

56. *'The river used to flow at approximately 200 cumecs all the time and there were so many salmon. We used to sit there and see the fish come in. There were that many fish, and you could see them in the water. You could see three salmon being caught at the same time.'*

57. *Too much of the information that is being put forward, i.e. Models on river, coastal etc, are out of date and not relevant to the river of today. There are dramatic changes happening to the river week by week with the increases on water take, be it directly or ground aquifers. An up to date, true and accurate assessment of the whole length of the river and especially what flow is left at*

*the mouth is required. How can you give something away when you don't know what there is?*

58. *If water consents continue to be granted our river will be reduced to little more than a stream. The shingle that used to be carried to the sea in floods, will remain in the riverbed, thus building up the riverbed and so future flooding could well become a major problem for surrounding farmland and homes.*  
(Bill Southward)

59. Flow readings are currently taken only above the Rakaia Gorge at Fighting Hill. There is a back-up recorder at the Gorge. There are no flow measurements being taken anywhere else downstream of the Gorge. Data gathering needs to be done to gauge where the river gains and loses volumes. Flow readings need to be carried out at the mouth to determine what is actually left by the time the water reaches the sea.

60. Ecan acknowledge that inconsistencies have arisen in the way consents have been granted and allocated to the various bands, and within the banding system in terms of consent conditions and how low flow restrictions are applied. They also acknowledge that some groundwater takes adjacent to the Rakaia River are considered to be having a stream depletion effect on surface water flows and that these stream depleting takes are not being consistently managed in terms of low flow restrictions. We know that there is little or no monitoring of consents.

61. Ecan also report that *'the lack of a statutory basis for allocating water and ensuring compliance with low flow conditions, together with questions regarding compliance with the requirements of the WCO, and various inconsistencies that have arisen, led the Council in November 2007 resolving to prepare a variation to the proposed NRRP to deal with these issues and formalise the allocation system'*. And *'Not managing the stream depletion effects has the potential to compromise the requirements of the Order'*.  
(Background Summary, Agenda for Regional Planning Meeting 10 September 2008.)

62. The Society is alarmed at the ad hoc way in which Ecan has implemented the plans in relation to the Water Conservation Order on the Rakaia, and we believe that the planning regime is so far behind what is actually happening on the ground.

63. Bearing in mind the impact of hydraulically connected groundwater takes and the additional present surface takes on the river, how can Ecan be sure exactly how much water is being taken?

64. The applicants are saying that their applications are within the remaining available allocation of 70 cumecs. We understand 35 cumecs is already consented but the vital question is, is there a further 35 cumecs available to allocate? The river is telling us there is not.

65. The **Rakaia River NCWO** states:

**7. (2) ... *the minimum gorge flow shall be retained in the river and, while the gorge flow does not exceed the minimum gorge flow, the flow in the river shall not be reduced by abstraction or diversion.***

The Society requests that all consents to take water from the Rakaia be placed on hold until the flows at the mouth are shown to be not less than the 'minimum gorge flow' as stipulated in 7.2 above. (Appendix 2 for 'minimum gorge flows').

66. Before any Rakaia consents are granted the following questions need to be urgently addressed:

- What happens to the water between the gorge and the sea - in summer and in winter?
- How much water is required to keep the Rakaia River mouth open?
- How much water is required to maintain the shingle bank?
- What is the cost of opening the mouth, protecting the shingle bank and the long-term damage to the foreshore, properties and homes?

67. The Society considers the ACWT applications to be a part of the "gold rush" for water. There are currently several court challenges to determine priority of the various takes. The Society believes the most important priority is to work out the actual amount of water available in the Rakaia River to be abstracted. Until that is certain, we ask the Commissioners to decline the ACWT applications in their entirety.

**The Malvern Hills Protection Society Inc.**

**15 September 2008**

Appendix 1.

13 Sept 2008

Garth Brookland  
36 Ranfurly St  
CHRISTCHURCH

Rosalie Snoyink  
Malvern Hills Protection Society Inc.

Dear Rosalie

**In the matter of the Resource Management Act 1991 and Applications for Resource Consent by Central Plains Water Trust and Ashburton Community Water trust**

I submitted an individual submission opposing these Applications. I stated that I wished to be heard and I thought my original submission covered the Joint Applications.

I am now aware that this may not be the case and may have missed out by not specifically resubmitting at sometime against the ACWT application. Like a lot of people I have talked to I'm a bit confused about the process that was required on this one.

However, I am a member of Malvern Hills Protection Society and support the Society's submission on the ACWT application.

My presented submission against CPWs proposal to take from the Waimakariri and Rakaia rivers focused on the in-stream components. I've been a bit of a lone voice here but with my experience in and on-river, I believe the works, and on going works associated with the attempt to divert and control these dynamic and unpredictable snow fed rivers will be the cause of the "greatest adverse effects" upon them. I feel strongly that it has been conveniently over-looked. Even after seven months CPW has produced nothing to convince me otherwise.

In fact as a frequent user of the areas and due to the lack of detail and the unanswered questions, I'm still in the dark as to how it is all to look or be achieved in river with only "minor" effect. Frankly, I find it unbelievable.

The ACWT application to take water from the Rakaia seems to lack the same in-stream detail. There is constant mention of only "minor" effects. The evidence is a mirror image of CPWs strategy. Even their photographic evidence shows no change to residual flows with takes. As mentioned in my CPW submission I believe it is their intention to divert the whole river to intakes and this is being hidden. I am completely opposed to the ACWT application for the same reasons I oppose CPWs proposal.

If I can offer any assistance to support your submission re these areas feel free to contact me.

Regards  
Garth Brookland

Appendix 2.

NWCO Rakaia River “minimum gorge flow”

- (a) January – 124 cubic metres per second
- (b) February – 108 cubic metres per second
- (c) March – 105 cubic metres per second
- (d) April – 97 cubic metres per second
- (e) May – 95 cubic metres per second
- (f) June – 96 cubic metres per second
- (g) July – 91 cubic metres per second
- (h) August – 92 cubic metres per second
- (i) September – 90 cubic metres per second
- (j) October – 106 cubic metres per second
- (k) November – 129 cubic metres per second
- (l) December – 139 cubic metres per second