

In the matter

of the **Resource Management Act 1991**

and

In the matter

of applications for resource consents by the **Central Plains Water Trust** and a notice of requirement for a designation of land

Further Statement by Trevor & Heather Taeye

1. Thank you for the opportunity to make a further statement. This statement relates to the tunnel alternative to the intake channel for the Upper Waimak and deals specifically with comments in the supplementary brief of evidence of Walter Lewthwaite (July 2008) on this issue.
2. The Commissioners in Minute No 4, #14, asked for details of the applicant's consideration of an alternative point of intake at the proposed Upper Waimakariri site, i.e. the tunnel, and for the reasons why it was rejected.
3. Mr Lewthwaite's explanation in his supplementary brief of evidence provides few details of CPW's consideration of the tunnel proposal and his explanation of the reasons why it was rejected do not provide an evaluation of the relative merits of the tunnel proposal and the intake channel. It appears that as the proposed intake channel was found to have the necessary elevation this meant that the tunnel proposal was not evaluated or further considered.
4. It is appreciated that CPW have not issued a notice of requirement or sought water permits in respect of the tunnel proposal. However the tunnel proposal is relevant as an alternative that needs to be considered when the Commissioners come to decide whether to recommend in favour of or against the requirement for the intake channel in the Upper Waimak and the associated water permits. The adverse effects of the intake channel in the braided Waimak riverbed are such that possible alternatives need to be taken into account in determining whether the water permits should be granted and the designation being sought confirmed. This is also a factor which the Commissioners can consider when coming to a conclusion on the overall merits of the proposed CPW irrigation scheme.

5. We have maintained that CPW have seriously underestimated the river works that would be required over time to maintain the flow required in the intake channel. It is apparent from Mr Lewthwaite's further evidence that this is still the position. The constant river works and the extent of them and their adverse effects have still not been recognised. Nor does any attempt appear to have been made by CPW to avoid, remedy or mitigate them.
6. Mr Lewthwaite states that the tunnel site was considered initially by URS when it was thought that this upstream site was identified as possibly being required for the intake on the Upper Waimak if the river bed degraded at the intake channel site leaving the scheme unable to take water. I assume at that point the tunnel was a viable and feasible solution as it meant that CPW could take water from the next bay upstream and tunnel it through the bluff.
7. According to Walter Lewthwaite's evidence topographical surveys showed there was adequate elevation at the channel site and this removed the "*driver*" to consider the tunnel site.
8. Mr Lewthwaite gives six reasons in his statement why the tunnel option is not preferred by CPW. They are –
 - Not necessary – It is said that the upstream site is not necessary in terms of elevation for a water supply intake. This ignores that the upstream intake is a better source of water and a more reliable one. Minimal training of the river for the intake would be required. A solid rock bluff is the best place to extract water from.
 - Operational reliability – The outside of a bend is described as a "highly desirable location" as river flows with the swiftest and deepest flows thread against the bluffs. However at the channel intake site the river does not flow regularly with a strong thread against the Waimak's right bank and river training works will be needed more frequently to maintain an adequate and deep flow to the intake. CPW would have to undertake significantly more work and cause more disruption in the river bed to channel sufficient water for the scheme from what has just become a wide braided river.
 - Costs - The figure of \$8M has escalated from \$5-6M two years ago. I think this is a guess, a ball park figure, with no comparison being made with all the ongoing river training works that will be required for a channel in a large braided river. Over say a 20 year period the cost of a major diversion and constant river training after floods and freshes in the river could well exceed \$8M. It is not always the cheap option which is the best in the long term.

- Disruption to natural flora – In my opinion there would be very little disturbance of the native bush because the tunnel entrance would be at the rocky bluff and the long tunnel shown on App 1 is well clear of the Millikens’ stand of native bush. In any event any damage during construction would be temporary and the bush would quickly rejuvenate.

 - Safety at intakes – Every other intake I have seen manages to have a safety program in place with satisfactory signage. If you put warning signs up at the beginning of open channels they can be hard to see and would get washed away with every flood. My research has told me that it is dangerous for kayakers to kayak alongside a bluff like that on Millikens Bend, even without an intake, as they can get washed against rocks and tip upside down through the water’s hydraulics. This can happen in many places in the Upper Waimak Gorge. The tunnel intake would be an easy place to erect danger warning signs. In any event the normal course for kayakers and others is to move straight from the previous braided section direct to the part of the river just off the proposed channel intake without going near the bluff where a tunnel intake would be. Kayakers, canoeists, and other users of the river avoid pools such as exist at Millikens Bend because of the dangers they pose.

 - Disruption to Taege’s property – The short tunnel proposed by Walter Lewthwaite has never been mentioned to us. Nor would it ever have been considered by us. As it would destroy our tourist centre, toilets, septic tank, car park, Waimak Alpine Jet’s jacket shed, access to the river, access to the Beehive picnic area and the native bush reserve. The long tunnel option removes these difficulties and is an option that would enable the tourist centre and Waimak Alpine Jets to continue as they have done for many years.
9. The long tunnel has however a number of advantages which should have been taken into account. The long tunnel, as shown in Appendix 1 is the only common sense plan that has been put before us, placing the intake in a similar position as any other major irrigation scheme and is comparable with the intake at the Gorge Bridge. We know from experience from when jet boating began in 1992 that the main stem of the river runs along the right bank for more than half the time. When the main stem is not running past the tunnel intake site there is always a deep hole at the intake site filled with water from the main stem which is running in the centre of the river. This would make river training a very simple operation to ensure there is water at the intake. The long tunnel option would require far less river training than that required in the braided river bed. This would be a very reliable source of water. There would be no reason for a kayaker to go near the intake.

10. An important consideration is that a tunnel intake site would have considerably less adverse effects on what is a beautiful river environment. A long tunnel with a cut and cover back to the river bed would make a very tidy intake. It would mean that tourists arriving at our place would not even know there is an intake running across our property. It would leave the braided river in its natural environment and not look like a shingle pit with constant movement of machinery, noise and dust.
11. The alternative long tunnel option would remedy and mitigate most of the adverse effects on the environment. Because of the controlled amount of water in the tunnel this would mean that no excess water would flow to the intake structure of the sediment pond. The intake gates at the river end would be shut down in flood times not causing any flooding down stream, e.g. to the Taege and Mehrtens' properties.
12. In terms of Mr Lewthwaite's three scenarios, we would not expect CPW to assist in scenarios 2 and 3 as they are well down past the WAJ launching site and should have no effect on the launching of the boats.
13. Mr Lewthwaite states that for scenario 1 it would be reasonable for CPW to prioritise opening a channel for launching the jet boats. However for times when they do not need to take water from the Waimak they would not. I take it from this that they intend leaving a dry channel which would mean that there is no water, only a large dry channel, at the launch site. This would be totally unsatisfactory. It also conflicts with what we have earlier been told – that they would keep water in the channel at all times.
14. The evidence is also conflicting where Mr Lewthwaite states that 10 m³/s will flow down the return channels beside the intake gates for kayakers who enter the intake channel. Scenario 1 is not an option for us as this option would put an end to boating from the present launching site. I recommend that this option be declined and the panel recommend against the area being included in the requirement to well below the gate as described in my main evidence.
15. Mr Lewthwaite also recommends a wide entrance to the diversion channel (for scenario 1). This is a recipe for disaster as it will lead to massive diversion of water in flood times against the natural flow of the river. It would destroy the natural protection of the river through the rocky bluffs diverting the water towards the centre of the river away from the right bank. In addition, you cannot launch a boat in a 25m wide channel satisfactorily while others are using the channel. Scenario 3 was the subject of the requirement issued to the Selwyn District Council and CPW should stick to it.
16. In terms of minimising as far as practicable impacts on the environment, CPW has underestimated the power and force of the Waimakariri River and the continual excavation and river training work that will be required and the consequential dust in the river bed.

The impact will be huge and it would be impossible to minimise adverse impacts on the environment such as visual, noise and dust.

17. Since giving our main evidence, the last flood (12 July) has eroded the bank under our native bush upstream from the launch site. On 22 July a senior ECan officer inspected the site and gave us some advice for the maintenance of the river bank. This is an indication of the force of the river and its changing river patterns.
18. If however the panel recommends upholding CPW's designation and approves the grant of the water permits, we would ask the Panel to include appropriate conditions that would safeguard the existing tourist venture and the jet boat operation and would enable the safe and efficient continuation of Waimak Alpine Jet's jet boat operation. Appropriate provision should be made to enable the jet boat operation to continue in the proposed River Diversion Management Plan.
- 19 We request that the Commissioners decline the consents and the designations.

Trevor and Heather Taege and family

August 2008