



Response to consent mitigation conditions proposed by Central Plains Water

By Tony Ward-Holmes.

On behalf of the New Zealand Recreational Canoeing Association.

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1 Introduction

1.1 My name is Anthony Ohau (Tony) Ward-Holmes. In this response I speak on behalf of the New Zealand Recreational Canoeing Association (NZRCA), of which I hold the position of South Island Conservation Officer. Background on the NZRCA is in our original evidence of 10 June 2008.

1.2 I have read Charles Tipler's supplementary evidence of 4 July 2008. A number of impacts and potential mitigations are discussed, resulting in the following conditions being proposed:

Par 22. *"Subject to condition ??, Class B water shall only be taken subject to the following conditions:*

(a) whenever the un-modified flow in the river is between 63 – 73 m³/s as measured at the Old Highway Bridge, the take shall not exceed the excess flow over 63 m³/s.

(b) whenever the un-modified flow in the river is above 73 m³/s as measured at the Old Highway Bridge, the take shall not exceed 10 m³/s plus half the excess flow over 73 m³/s."

Par 31. *"...If at 1 May of any year, the stored water in the reservoir exceeds 20 percent of full capacity, water shall not be taken on at least six occasions of 34 hour duration, over the period 1 May – 30 September, if the flow in the river as measured at the Old Highway Bridge would fall below 80 m³/s as a consequence of this take. The timing of these events shall be decided in advance through negotiations with recreational boating groups."*

Par 36. *"...During January and February of each year, water shall not be taken for the purpose of filling the reservoir if the flow as measured at the Old Highway Bridge would fall below 51 m³/s as a consequence of this take."*

Par 37. *"...During January and February of each year, water shall not be taken on Saturdays or Sundays if the measured flow at the Old Highway Bridge would fall below 80 m³/s as a consequence of this take."*

1.3 Rather than discussing the pros and cons of each proposed condition, I suggested that we comment only on the net impact on the kayaking amenity of all the conditions combined. To comment on the impact, post-condition daily flow data was required, for which the following request was made:

NZRCA therefore asks the commission to require CPW to supply pre-CPW and projected post-CPW flow data, to NZRCA assuming the following:

- The proposals listed above all become conditions attached to the water-take consent.*

- For the purposes of analysis, the six occasions negotiated for par. 31 shall be the 1st and 3rd weekends of each of July, August and September. I.e. if the reservoir is above 20% on those dates no flow below 80 cumecs will be taken.
- The daily flow data shall be for the known flows, i.e. from 1967 to present.
- The 2 scenarios of Synlait / NTP / flow sharing that are currently considered the most likely are requested to be provided in separate spreadsheets.

2 Effect of the CPW take on kayaking amenity

2.1 URS staff responded to my request above by sending a spreadsheet of Waimakariri daily flow series, for both NTPL and CPW priority of take. For the period 1968 – 2000 inclusive, the flow average, median, and 50 and 70 cumec day counts are shown below. The “Post-CPW Mitigated” columns show the flow after applying the mitigation conditions proposed by Tipler.

	Modified flow (R de Joux)	NTPL Priority				CPW Priority							
		Pre-CPW	Post-CPW	Post-CPW Mitigated	% effect of CPW	% effect of mitigated CPW	% effect of mitigation	Pre-CPW	Post-CPW	Post-CPW Mitigated	% effect of CPW	% effect of mitigated CPW	% effect of mitigation
average	127.89	110.47	101.24	101.27				113.08	103.35	103.37			
median	95.03	75.83	63.23	62.59				78.60	66.36	65.34			
count days	12054	12054	12054	12054				12054	12054	12054			
count days < 50	958	2991	4907	4392				2667	4634	4276			
count days < 70	3251	5456	6569	6703				5119	6327	6434			
% days < 50	7.95%	24.81%	40.71%	36.44%	164.06%	146.84%	89.50%	22.13%	38.44%	35.47%	173.75%	160.33%	92.27%
% days < 70	26.97%	45.26%	54.50%	55.61%	120.40%	122.86%	102.04%	42.47%	52.49%	53.38%	123.60%	125.69%	101.69%
annualised < 50	29	91	149	133				81	140	129			
annualised < 70	98	165	199	203				155	192	195			

2.2 The NTPL Priority shows a lower impact because it starts from a more degraded flow, ie: after NTPL’s take should NTPL eventually win the current court battle. For the purposes of this discussion I will use the CPW priority figures, as my understanding is that the Court of Appeal decision awarded priority to CPW. The above spreadsheet fragment shows the effects on the kayaking amenity by the raw CPW consents, compared to the current abstractions, to be approximately as follows:

	Pre-CPW %	Pre-CPW days p.a.	Post-CPW %	Post-CPW days p.a.	Increase %
< 50 cumecs	22%	81	38%	140	74 %
< 70 cumecs	42%	155	52%	192	24 %

2.3 The spreadsheet fragment shows the effects on the kayaking amenity by mitigated CPW consents, compared to the current abstractions, to be approximately as follows:

	Pre-CPW %	Pre-CPW days p.a.	Post-CPW %	Post-CPW days p.a.	Increase %
< 50 cumecs	22%	81	35%	129	60 %
< 70 cumecs	42%	155	53%	195	26 %

- Under the package of proposed mitigation conditions, the number of days not reasonable for kayaking still increases from 81 days to 129 i.e. by 60%.
- The improvement due to the mitigation is minor.. the mitigation has removed only 19% of the extra days not reasonable for kayaking. $(1 - (129 \text{ days}/140 \text{ days}) = 19\%)$
- Under the package of proposed mitigation conditions, the number of days less than preferred for kayaking actually gets slightly worse.

- The number of days less than preferred was 192 days per year for the raw CPW consent, under the consent with conditions package it rises to 195 days.
- Thus I would say that proposed package of conditions does not benefit kayakers much if at all.

3 Conclusion on CPW effect on kayaking amenity

- 3.1 The conditions offered do not significantly mitigate the CPW effect on the kayaking amenity. By some measures the effect is in fact worse.
- 3.2 We would suggest suitable mitigation would be more along the lines of what Richard de Joux was suggesting for Fish and Game, i.e. no take below 100 cumecs.

4 Other matters

- 4.1 I have not noticed any further evidence posted by the likes of Tipler, Mabin or Bright on the impact of CPW's Waimakariri water-take on the Christchurch City aquifers. On Monday 18 I was in Wellington at the National Party water policy forum. ECan Councillor Mark Oldfield was one of the attendees, he stated that ECan now use a figure of 15% for aquifer recharge from rain, which leaves 85% to be from rivers. This is even more than the value I assumed for recharge from rivers. The basic fact is that CPW will reduce the aquifer recharge by almost as much as the entire Christchurch City abstraction. This is surely a matter for investigation before the water-take consent can be granted.

Tony Ward-Holmes
22 August 2008