

Lower Waitaki River Management Society Inc
c/- Bill Penno
“Greenacres”
No 10 RD
Waimate

Environment Canterbury
Attention Ciana Cerri

Dear Madam

**Resource Management Act 1991 Resource Consent Application
Hunter Downs Irrigation Ltd – Call for additional submissions**

- 1 We refer to the Minute of the Commissioners dated 11 Dec 2009 and the call for additional submissions on 3 specific matters regarding this application.
- 2 The Lower Waitaki River Management Society wishes to comment on the first matter only – that of the annual allocation of water to the scheme.
- 3 The main interest of the Society is to regain as much water in the river as possible by promoting sustainable and efficient irrigation. We therefore endorse the Commissioners’ wish to ensure that only the reasonable requirements of the scheme are allocated for.
- 4 In paragraph 4.9 of our written submission we included the following list of measures that could be used to reduce demand some of which would affect the annual volume required.
 - i reducing the extent of the command or the proportion of irrigated area within the command,
 - ii reducing the peak unit irrigation supply rate buy accepting a lower reliability (currently set at 1:10 year drought event) and/or improving irrigation efficiency (with the use of canal lining or piping for example)
 - iii maintaining the same scheme capacity but accepting a degree of unreliability perhaps formally apportioned by the use of shares
 - iv utilising off-farm (above ground or aquifer) or on-farm storage and funding it with reduced primary pumping and canal capacity costs.
 - v increasing the proportion of crop to pasture under irrigation.
- 5 For that submission we had assumed that the area of arable compared with intensive pastoral would be taken into account in both the instantaneous and the annual allocations. If sufficient water is to be allocated for irrigating 100% pastoral land on the entire command, then the impacts and risks of this would be greater and would need reconsideration – particularly regarding nutrient load and raised watertables and their impacts on existing drainage capacity and ecology (Referred to in paragraph 4.19 of our written

submission). This could have both adverse and beneficial effects that would need to be weighed.

- 6 A factor that is important in determining the annual demand is the “scheme factor” which takes into account the fact that not all scheme members in the entire command will be requiring the theoretical maximum in any one year due to such factors as fallows, cultivation, mechanical and social/management factors etc. It is not clear to us that this factor has been taken into account by the applicant in estimating instantaneous and annual allocations.
- 7 To the extent that the annual allocation is affected by the reliability chosen for the scheme, we would comment that we understand that provision of 100% of the water with 90% reliability (1:10) to be high for community irrigation schemes internationally and that the 80% (1:5) reliability adopted in the WQN9 is more typical. It is easy to overlook the fact that even when there is a shortfall year, most of the water requirement is typically still met and hardship is unlikely to be of great financial consequence. As indicated above, storage to bridge such shortfall remains an option where this level of reliability is inadequate to reduce stress on the river at critical times.

If there is to be further hearings then our Society would like the opportunity to be heard once it has seen other submissions on these issues.

Thankyou for the opportunity to submit on this issue.

Yours sincerely

Bill Penno
Chairman
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