20 August 2001

Details Emerge on Proposed Water Enhancement Scheme

More details about a scheme providing water to irrigate 84,000 hectares on the upper Canterbury Plains emerged today in a discussion paper published by Central Plains Water, which is studying the project's feasibility for the Christchurch City and Selwyn District Councils.

Chairman of Central Plains Water Doug Marsh said while the picture was becoming clearer, there are still a number of important issues to resolve.

"These issues are being felt most acutely in the communities of Wairiri, Coalgate, Glentunnel and Whitecliffs, neighbouring and within the proposed storage reservoir. We understand what a difficult position this work has put those communities in and are anxious to continue working with them to arrive at acceptable solutions on the issues of concern.

"Although we do not yet have all the answers, there are a number of positive signals in the detail that has been developed. We know that it will be possible to build a dam and create a reservoir to store water in Wairiri Valley. We have a number of viable options to transport water to that reservoir. We have a better idea of how much a scheme will cost. We know that, using the storage from the reservoir; there is sufficient water available in the Waimakariri and Rakaia rivers to irrigate to a level of reliability that has not been possible before. And we know we can do all this without exceeding the limits set by regulation to protect the environmental values of these rivers.

"However, there are still some very important questions that we do not yet have answers for.

"These include the best way to finance and operate a scheme, how best to integrate the environmental enhancements the community seeks and whether the social and environmental issues raised by those neighbouring the reservoir site can be addressed to the satisfaction of all concerned. We expect to have answers to all these questions by the end of the year, when we will be reporting back to the two parent Councils with a recommendation on whether to proceed further with this project or not.

"We now have much of the technical detail of the proposed scheme. Our task over the next few months, as more of this technical detail is developed, is to consult with the relevant communities and interest groups concerned to balance the technical, economic, environmental and social aspects, which will enable all concerned to determine whether the project is sustainable," he said.

Other key findings in the discussion paper published today include:

- A topographical survey of Wairiri Valley assessed that to provide storage of 250 million cubic metres, a water level of RL 313.7 m (i.e. above sea level) is required. Building an earth dam 47 metres in height would achieve this, resulting in the inundation of all of the 14 Wairiri Valley houses behind the proposed dam.
- Geotechnical investigations reveal that Wairiri Valley is an ancient lake. Beneath the proposed dam site are relatively weak fine sediments deposited on the bed of this lake. As a consequence, much of the foundation material would have to be excavated to reach sufficiently strong sediments to support the dam.
- Although there are cost implications for the scheme, it appears feasible to provide sufficient reliable irrigation water to 10,000 ha in the Sheffield/Springfield area. This would be via a take from the Waimakariri River adjacent to the Kowai River mouth. At a peak take rate of 6.5 cubic metres per second; this would be pumped up onto the plains into a small headrace canal running from near Springfield to Wyndale Road. When Waimakariri River restrictions are in place, water will still be taken from here, and compensation flows would be released from the Wairiri Reservoir back into the Waimakariri River to replace water abstracted for the Springfield/Sheffield area.
- Since Central Plains Water first published its Scoping Study in December last year, the Ashburton Community Water Trust has published the results of a similar exercise assessing the possibility of a large community water enhancement scheme for Mid Canterbury. Both proposals have identified a requirement for the water in the Rakaia River still available under the National Water Conservation Order. Technical consultants for both parties have worked together to identify a number of scenarios where each can co-operatively access sufficient water to maintain the viability of their schemes, without exceeding the set limits.
- A 28 m wide headrace canal is proposed between the Rakaia and Waimakariri Rivers along the 235 m contour. This canal would transport water from either river for pumping to the proposed storage reservoir or for discharge to distribution canals down the Plains.

Costs to construct the proposed Central Plains Water scheme are now estimated at \$200 million. Financing options to equitably apportion these costs are also part of Central Plains Water's brief, and will be investigated over the next few months, said Mr Marsh.

A social and economic impact assessment carried out by Central Plains Water last year concluded a large water enhancement scheme could result in up to 4,000 jobs and generate \$600 million per annum in the Canterbury regional economy.

Further information: Rob Smith, 379 0450, www.cpw.org.nz