News Release
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Water Scheme Proponent Opts for Alternative Storage Site

Central Plains Water has opted for the Waianiwaniwa Valley as site for the storage reservoir that will be a key component in its proposals to provide water for irrigation to 84,000 ha of Central Canterbury. Following extensive geological and topographical studies and consideration of social and environmental issues, the Central Plains Water Enhancement Steering Committee has chosen the Waianiwaniwa Valley as its preferred storage site, ahead of the previously favoured Wairiri Valley, said chairman Doug Marsh.

"Originally it looked as if Wairiri was the best site, but now we have investigated both valleys to the same level of detail, Waianiwaniwa offers the overall scheme greater capacity, a degree more flexibility and would be slightly less expensive to build. Following consultation with stakeholders, applications for resource consents for a scheme will proceed based on storage in the Waianiwaniwa Valley.

"However, we are very fortunate that both Wairiri and Waianiwaniwa are feasible sites. The recently published Canterbury Strategic Water Study identified a dearth of potential storage sites throughout the region. We are very lucky that we have two suitable sites in the District. If for some reason it is not possible to proceed with a reservoir at Waianiwaniwa, Wairiri is still a perfectly feasible fall-back," said Mr Marsh.

The Waianiwaniwa Valley is approximately 11 km west of Darfield, adjacent to the township of Coalgate. An earth dam 2km long and 50m in height across the mouth of the valley would create a storage reservoir capable of holding 290 million cubic metres of water with a surface area of approximately 1,300 ha. This amount has been identified as required – in dry years usually between February and April – when run of river water from the Rakaia and Waimakariri Rivers might be restricted and unable to be used for the proposed scheme.

According to Mr Marsh, the Steering Committee decision to favour the Waianiwaniwa site over the Wairiri Valley as its preferred option for a storage reservoir was based on a number of factors:

- Less disruption to neighbouring communities – including no impact on State Highway 77,
- The capacity to increase the reservoir size to up to 450 million cubic metres by building a 10 m higher dam,
- Slightly lower capital and operating costs than the Wairiri proposal,
- Apparently better opportunities to use the reservoir for recreational purposes, though detailed assessment of this is still required.

"Waianiwaniwa Valley also offers the possibility of a gravity feed canal from an intake on the Waimakariri River upstream of the Kowai River, which would have a higher capital cost, but would reduce the annual power cost required to operate the scheme. There is a possibility of hydro-electric power generation with such a gravity

stakeholders – particularly those in the Sheffield-Springfield area, as a gravity feed canal also offers a convenient way of including this potentially very fertile land in the scheme," he said.

Aside from the storage site, previously published technical details of the proposed scheme have not altered. These are:

- Intakes on the Rakaia and Waimakariri Rivers just below the two river gorges.
- A 56 km long level headrace canal, 235 m above sea level between the Rakaia and Waimakariri Rivers.
- An open race reticulation network to supply water for irrigation to up to 84,000 ha of land.

When available, run of river water will supply the system via the headrace. During low river flows the shortfall would be supplied from the reservoir. When supply exceeds demand, the headrace will deliver surplus water to replenish the storage by pumping from the headrace to the reservoir.

Refinement of the concept proposals, including an assessment of environmental effects, is scheduled for completion late in 2003. Best projections are for construction of the scheme at a cost of $235 million in time for the 2008/09 irrigation season.

Further information:
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