

Why Canterbury needs to further develop a community water enhancement scheme

Using water from the region's characteristic braided rivers to promote Canterbury's economy by irrigating farmland was first suggested in 1883. There has been serious consideration of community water enhancement proposals at least every generation since.

On Monday, Christchurch City and Selwyn District Councils will consider whether to take the latest proposals for a large scale water enhancement scheme to the next stage.

These proposals, costed at \$235 million, would fill a substantial storage reservoir in the Canterbury foothills using water from the Rakaia and Waimakariri Rivers. Providing water direct from the rivers and from the reservoir would make it possible to irrigate at least 300 farms on 84,000 hectares.

Canterbury's wealth and a large part of the region's historical identity derive from agriculture. Primary production is one of our strengths. Boosting the regional economy by finding even better ways of doing what we already do well is a logical strategy. Agriculture already out-performs the New Zealand economy as a whole. If the rest of the productive sector could match the productivity level achieved by agriculture, the government would meet its goal of being in the top ten OECD countries within seven years.

Canterbury has sufficient water to meet the province's diverse environmental, social, recreational and economic demands. However, this water is not always in the right place at the right time. In the past the inability to control the moisture environment has been the single biggest constraint to unlocking Canterbury's vast potential for wealth creation. Achieving reliability of supply will overcome that constraint.

The rationale behind these proposals is to provide water where and when most needed by 'harvesting' a fraction of the abundant quantities that flow to sea from the Waimakariri and Rakaia Rivers during the winter and spring for subsequent release during dry summers.

Central Canterbury is not alone in looking at the possibility of using water to focus economic gain. At least half a dozen similar proposals are under the microscope within rural communities from Nelson to Otago. In total these schemes have the potential to irrigate some 300,000 hectares.

The motivation generating this enthusiasm is not difficult to find. Communities from Waipara to Waitaki, Amuri to Opuha are seeing tangible benefits from irrigation. The equations are simple. Water on land makes produce – or grass, crops, vines, vegetables, flowers – grow. A consistently reliable supply of water gives the farmer a much more secure basis on which to plan a growing season, and a much greater variety of what can be profitably grown. Greater profitability demands and stimulates a larger workforce, more people leads to better roads, more new business start-ups, better services, more classrooms in the local school and a generally more vibrant community.

Which, put crudely, has the potential to generate considerable wealth. From watering 84,000 on the upper Central Plains, the economic benefit to the Canterbury region is conservatively estimated at around \$650 million per annum, creating around 2,500 full time equivalent jobs. Figures could rise as high as \$1 billion per annum and 6,000 jobs, depending on what land use options eventuate.

Two thirds of the economic benefit and a proportionate quantity of the employment opportunities would be created off farm, not just on the 300 or so farms that would receive water, but also in the townships that service them and process their produce, such as Darfield, Dunsandel, Sheffield, Kirwee, Hororata – and Christchurch.

Extensive irrigation developments to the north of the Waimakariri and the south of the Rakaia are already bringing this kind of economic and social benefit through intensified land use. A future without a community water enhancement scheme for the Central Plains will leave farmers in this district the prospect of continuing with a dryland existence. Professional farm advisors consider viable commercial agricultural production will be unsustainable in the future without irrigation. One probable consequence of this will be the further conversion to lifestyle blocks of some of the potentially most productive farming land in the country.

An alternative for Central Plains farmers wishing to sustain profitability in their farming practices would be to seek access to groundwater. This is an increasingly expensive option, but one that is increasingly attractive to farmers wishing to access the benefits of irrigation. Groundwater between the Waimakariri and Rakaia consented by Environment Canterbury to be taken for irrigation has increased by 50 per cent since 1995. There are big questions about how much longer such increases can be sustained. Until definitive work to quantify these particular aquifers is completed, it is prudent to treat this as a finite resource with definite limitations. To continue to access such a resource without limit is to risk consequences that would be felt not just on the Central Plains but possibly on the Christchurch water supply as well.

There are also potential risks associated with proceeding to develop a community water scheme. At this stage, however, it seems all these can be resolved. All the same, the recommendations before the two Councils stress a cautious approach, balancing minimal risk of public funds against maximum flexibility and seeking the Councils' approval to proceed as a precondition at each further stage.

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Doug Marsh is Chairman of Central Plains Water, the committee jointly set up by Christchurch City and Selwyn District Councils to investigate the possibility of a water enhancement scheme. He is also President of Business New Zealand and the Canterbury Employers' Chamber of Commerce.