## Irrigation versus Conservation – can they co-exist?

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Do environmental values have to be sacrificed in the pursuit of economic growth and stability? Can the use and development of natural and physical resources align with the principles of sustainable management and avoid unduly compromising environmental values?

This paper explores these questions by examining the development of a large irrigation intake and pipeline in the bed of Canterbury's Rakaia River. The values of the Rakaia River were recognised in 1988 with a National Water Conservation Order protecting the river's outstanding natural character,



and its outstanding wildlife habitat, trout and salmon fishery, and recreational values. The river and its bed are also recognised in the Ashburton District Plan as an outstanding natural landscape, a geo-preservation site, and an area of significant nature conservation value.

With a mean annual flow of 216 cumecs, the river is a tempting source of irrigation water to support the primary industry engine driving the mid-Canterbury economy, and supporting the community's social and cultural well-being. This scheme will enable up to 10,000 hectares of productive land to be irrigated. But at what environmental cost? How can irrigation intake infrastructure covering six hectares, a seven kilometre pipeline and a hydro-generator be developed in the riverbed while protecting the river's outstanding values and while achieving the purpose of the Act?

By taking careful account of the environmental values of the river in designing, building and operating the scheme, we demonstrate how economic growth can be achieved while protecting and in some cases enhancing environmental values.



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