

## CASE STUDY: CENTRAL PLAINS WATER LIMITED

# The modern face of New Zealand irrigation

***Central Plains Water Limited (CPWL) is a community irrigation scheme being developed in Selwyn District, which will take water from the Rakaia and Waimakariri Rivers and redistribute to farms across 60,000 hectares. When up-and-running, this Central Canterbury scheme will represent the modern face of New Zealand irrigation.***

CPWL has been designed to replace the use of environmentally sensitive groundwater in the area with a more practical and sustainable surface water scheme, supported by water storage. The scheme was integrated into the region's water vision – the Canterbury Water Management Strategy (CWMS) – because it will improve water efficiency and water quality in the district. CPWL will help the Selwyn Zone achieve its water aspirations under the CWMS, in particular nine goals which sum up the community's environmental, recreational, cultural, economic and socio-wellbeing needs.

Switching farmers, who are currently pumping groundwater from depths of up to 200metres to more sustainable surface water supplies, will relieve the pressure on over-allocated groundwater takes in the district. Over time local aquifers will be replenished and water levels in lowland streams restored. The water quality of Te Waihora/Lake Ellesmere is also expected to improve.

The environmental benefits of this approach can't be understated and having access to reliable alpine water is key to CPWL's viability. An agreement signed with TrustPower means the scheme can store water in Lake Coleridge, which means it can guarantee 95% reliability of water supply for farmers in stage one of the development. Another advantage from the move away from groundwater is a reduction in energy use. By providing pressurized water to the farm gate, CPWL estimates on average it will reduce shareholders' energy consumption from 15 to 3 megawatts-hours. The long-term benefits for New Zealand from energy savings of this magnitude are considerable.

CPWL will also lead shareholders towards more sustainable and efficient farm practice. Its proposed collective approach to managing nutrients and on-farm management means it has the potential to deliver widespread environmental benefits. Farmers who sign up to the scheme will need to prepare Farm Management Plans designed to minimize their impact on the environment and maximize water use efficiency. The scheme is also working closely with regulatory authorities to better align processes around the consenting and actual use of water in Selwyn District.

Finally CPWL is a SMART Irrigation scheme because it has been designed to incorporate monitoring systems that will further improve the water efficiency of its irrigators. While the technology is still under development, CPWL's design has capacity for macro-scale soil moisture and rainfall monitoring systems to be added in the future. This will have the potential to create a highly responsive irrigation system that will ensure even more targeted irrigation application.

For more information:  
[www.cpwil.co.nz](http://www.cpwil.co.nz)

