

Cleardale Power Station

By Barbara Duffy - Ten years ago Cleardale power station was a vision that Ben Todhunter toyed with - a small hydro scheme working in conjunction with irrigation.
"It was outside my area of expertise," he said, "and I needed someone to do the numbers, look at the feasibility of the scheme and invest capital."

After approaching local power companies, MainPower, which encourages projects using renewable energy resources, was the most interested and preliminary investigations began seven years ago.

Original consents to take water for irrigation had lapsed so Mr Todhunter reapplied but was turned down by Ecan. He took it to the Environment Court but the judge agreed with Ecan's original decision. It was a frustrating time for Mr Todhunter but eventually his perseverance paid off.

With consent finally granted, designs finalized, tenders sought, Breen Construction in Alexandra was awarded the contract. Work began in January 2010 and was completed the following December.

The intake is located three kilometres up the Little River stream, a small tributary of the Rakaia River. Part of the stream flows through the 30 metre structure sifting out the stones, shingle and silt before diverting it into the 3000m fiberglass underground penstock and down to the power station.

The water is run through the power station and a small portion is taken for irrigation with the remainder returned to the Little River. Power is supplied to the Ashburton network and with an annual 4.4 million kWh being generated, there is enough to power 500 average homes.

Mr Todhunter's vision had been achieved and, as a consequence, 92 hectares of irrigation has turned "nothing" river flats into productive farmland. In time a further 140 hectares, which have better soil, will be converted, opening up a range of farming options.

Mr Todhunter is very aware of preserving the waterways and native bush on Cleardale Station. Streams and wetlands have been fenced off and bridges built over streams enabling stock to move from one paddock to the next. He has planted two kilometres of willows along the Rakaia River bank to stop erosion and he is actively fencing off native bush areas.

MainPower's slogan "The power to make it happen" applies to Mr Todhunter as well.