

# Water Efficient Farming



## Re-use, or go dry

Krowera dairy farmer, Andy Thomas, admits that he had always taken a good water supply for granted. 2006 changed that, however. "By mid-September, we knew we were in trouble," he recalls. "Our two larger dams were half empty, and there was no run-off. We had to find water somewhere or we weren't going to get through."

Andy bought in one tanker load of water, to see how long it would last. "We had a couple of thirty degree days in a row, and it just evaporated," he says. "We realised that we needed to find more water somewhere on the property, or work out how to re-use the water we had."

Like many dairy farmers, Andy had a large reserve of water sitting in his effluent ponds – but was using fresh water to wash down his yards. With help from the DPI, and funding via the Port Phillip and Westernport Catchment Management Authority and South Gippsland Water, Andy installed a Yard-blaster to recycle water from his second effluent pond for wash down.

The Yard-blaster cost around \$15,000 (which included the nozzle, hose, pipes, pump, and approximately \$7,500 to extend mains power to the pumping site). Andy considers it a worthwhile investment, however. As well as saving water, the Yard-

blaster saves a lot of time, letting Andy wash down the yards in a matter of minutes. And although the wash down water is discoloured, Andy's milk continues to meet all industry standards.

The Yard-blaster solved Andy's immediate supply problem. However, he still needs to shore up his water supply to avoid another scare like he faced in 2006- particularly as his long term plan is to increase his herd from 190 to around 220.



*Andy Thomas demonstrating the yard blaster he uses to clean the yard. Note the colour of the water which is recycled effluent from the second pond of a two-pond system. Recycling effluent is a sure way to reduce the total amount of freshwater needed in the dairy. Photo by Jenny O'Sullivan*



*The Thomas family sitting down to discuss the next plan for the farm. Aerial photography really helps in farm planning, particularly when it comes to developing a water strategy for the farm. Photo by Moragh Mackay.*

Andy has taken a close look at the way water is captured and distributed around his property. He realised that while some catchments were not holding water, others were filling reasonably well. He also realised that water was not distributed evenly throughout the property which has limited his use of paddocks.

Using a local contractor, Andy has since tripled the size of two of his best performing dams, put in three new dams in good catchments, and filled in one dam that was in a poor area. He is also installing troughs throughout the farm which are fed from the larger dams using a combination of electric pumping and gravity feed.

Supplying fresh water to the dairy shed is a little problematic, as it sits on top of a steep hill. Andy is planning to enlarge one of dams closest to the shed, and is considering installing a windmill to pump water. There is also the possibility of using the windmill to generate electricity for use in the shed and/or to feed back into the grid.

Andy's efforts to secure a long term water supply are part of broader strategy developed in conjunction with the DPI, which includes irrigating his paddocks with the nutrient-rich water from his effluent ponds. Over time, Andy is confident that the strategy will help him create a more efficient and profitable business.



*As long as the girls are happy...  
Photo by Jenny O'Sullivan*

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