

“In loving memory of the Avon”

Trout are a wonderful barometer as to the cleanliness of water, or the overall health of a waterway. Along with salmon, they have a very narrow range of tolerance to any contaminants. So that once their water rises above a certain threshold of pollutant they are gone. As a consequence, trout are found in fewer and fewer natural waterways in Europe and America. And now, they are almost gone from the Avon.

When I was a boy (not all that long ago), I caught good trout using bubble and fly in the Wairarapa Stream and the Avon around Millbrook Reserve. I would walk through the Gardens, or bike around the City center and observe fish feeding, swaying gently in the current taking nymphs in the middle of the water column, or willow grubs off the top. It was a dependable pleasure this—dappled flanks darting across stones or weed, and always the pleasure of gazing into beautiful sparkling water.

That water is now a dreadful sullen grey—almost a non-colour. It never sparkles even on the sunniest of days. There is little weed-bearing sand, just ubiquitous grey sediment. Increased run-off from gardens, fertilizers, pools and other things urban, have combined with a general degradation of the aquifers that feed the Avon's headwater springs. Leaving the river a pale shadow of its former self.

I notice these things. I'm an angler. And I think it is very sad. Nothing though, compared to the dreadful carnage taking place out on Canterbury's plain.

On Easter Monday, to avoid traffic on HW1, I took the inland route from Geraldine to Mt Somers, and then Thompson's Track down to Rakaia. It was mayhem. The pyres were burning.

I know about dairying; its rapid expansion; its need for water; its comparative success. I'm an angler. I live in Christchurch. And I watch over these things. But nothing prepared me for this.

There is a terrible and wholesale land grab going on. East of HW82 from Orari north, the rate of current dairy conversion is astounding. The sheep farms of mid-Canterbury are rapidly disappearing. And the smoking pyres signal the end of shelterbelt upon shelterbelt, cleared so the new center pivot irrigators can do their thing. In mid-Canterbury peak power demand is in summer, because the demands of irrigation are even larger than those of normal winter heating. And from where will come the ever increasing power needed to drive these things?

The problem is not dairying per se, but the serious scale of its intensification. The plains of Canterbury are by nature dry in climate, and porous in soil type. Great for grain and seed, but trickier for dairy cows. Water, and lots of it, along with nitrate based fertilizers are needed to grow the necessary grass. It has been conservatively estimated that in Canterbury it takes 1200 litres of water to make 1 litre of milk! This is simply not sustainable. Particularly when there is evidence of serious leaching and run-off into the very water supplies needed to sustain it. And into the same water supplies that eventually, we drink! Dairy farming on the scale that we are now witnessing in Canterbury is a crime against the environment—a tragedy for us all.

It is a particular tragedy for water. Dairying gets our publically owned and increasingly scarce water for free. And then pays nothing for the degradation of water quality it causes for other users. This degradation happens in two ways: nitrate run-off from fertilizers and urea into waterways; and the over-allocation of water consents which drains aquifers faster than they replenish. Lowering groundwater resources underneath the plains has serious implications for the quality of all water, including our drinking water.

That is the situation now. But dairy farmers want more. The Central Plains irrigation scheme (currently at the consent stage) will allow the number of dairy cows on 60,000 hectares to double. Downstream of the two great rivers, the Waimakariri and Rakaia that will feed this great scheme, Te Waihora / Lake Ellesmere is all but dead. The Irwell, a once sparkling spring fed stream rising above the railway tracks at Dunsandel, is now dry much of the year. The trout fishing was terrific there only 15 years ago. This is very recent change.

And with roughly half our climate change emissions coming from ruminant animals—from their methane and from nitrates leached into the ground—the situation is only going to get worse. For dairying is the largest and by far the quickest growing part of this emissions regime. In environmental terms, and with particular ramifications for water, the smoking pyres of a mid-Canterbury Easter are a grave harbinger of

the future for us all. We need to charge for water. And we need to be precautionary—much more cautionary with irrigation consents than we have been up till now. Otherwise irreparable damage will be done.

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