

REFLECTIONS ON WATER

John Dawes, August 2006

Where there is water shortage it becomes precious. Where it is abundant, it comes cheap. And where there's serious scarcity, there's trouble ahead. Real trouble for those who rely upon *Adam's ale* for their livelihoods – in the pool industry, for instance.

Is it simply supply and demand to be measured by the price at the pump? Or, is there something else that can bring an economy to its knees? And, I don't mean the Minister of Water calling upon the rain god to bring relief, as was suggested by the Press in 1976.

In some dry provinces, there are dangerous disputes over rights of water. In a modern state like Britain where there's a surfeit of water – rain, river and subterranean – we are freed from the squabbles at the water-hole. Yet, like the Curate's egg, some parts of the kingdom are good, and other parts not so good in fact, the 'haves' and the 'have nots' almost set-up a west-east water divide where we can or cannot use a hosepipe, and need or need not prepare ourselves for the standpipe one day.

Now, is this fair assessment of a well organised economy? If not, where's the imbalance? Is it the user who consumes too much? Or, the supplier who provides insufficiently? Maybe, we should blame climate change or grumble that votive offerings are insufficient to save ourselves from the vagaries of weather and the unseen rain god!

Only a very small percentage of the world's water is fresh. In Britain, we have recently been taking for granted our seemingly unlimited supplies. Though, there is still a long history of care and conservation, storage and distribution, from waters that heal to aqueducts that supply, artesian wells to Welsh reservoirs, all developed to keep and to supply potable water.

In such sea of plenty lies our problem. The poet Coleridge on taking a trip 'Upon a painted ocean' 200 years ago, pointed out the fallacy of endless supply to an ancient mariner with:

'Water, water, everywhere,

Nor any drop to drink.'

Today, we also have plenty of water all around us, but can't use it!

In the drier east and south-east there is a water shortage. 2006 may be 'suffering' the driest summer for two centuries, with the hottest July delivering only half its normal rainfall, but undoubtedly, we still don't have a drought. Our problem lies with the management of water and infrastructure.

We can reduce the problem by using less water. One leading light in the water industry, in order to 'use less, save more', claimed he would stop bathing at home, yet could stay fresh and pure at work ... it took the tabloids some months to expose his duplicity, writing in their financial pages that 'he was seen nipping over the border to bathe at his mother's place'.

There are many silly things said to save water and to lead us away from using up a precious resource; for example, 'Bathe your baby less ...' from Yvette Cooper, Planning Minister. Or, Thames Water saying, 'we spend £500,000 per day repairing leaks'; that's 6p per day per household. At the current rate that they are now progressing with the replacement of pipes, it has been calculated they need another 128 years to finish the job.

It may also be useful know that our Water Authorities continually suffer 5 billion litres of leakage per day. In our terminology, that's the same as losing 2500 Olympic-sized swimming pools-worth per day (in fact, about 200 litres per household). To be fair, we as a nation are lower than mid-ranking in the European leak-league table:

EU Country	Loss by water authorities
(for example)	
Bulgaria	50%
Ireland	34%
France	30%
UK	22%
Denmark	10%
Germany	3%

Leakage can be a useful measure of efficiency, and OFWAT, the water industry's

watchdog, point out that there are seven companies today failing to meet their leak-saving targets, with two failing seriously: United Utilities are regulars and Thames Water have consistently missed their target for six years. Seven Trent supplied misinformation and are currently under serious investigation by the Fraud Office.

On the other hand, United Utilities made the most company profit at £652 million with Thames Water nearly halfway down at £346 million. The total water industry profit is only £2 billion and prices to the consumer will have to rise at 8.5% higher than inflation to meet their working costs. For in the reality of business life, water is less profitable than gas or electricity. RWE (Thames Water owners) have paid £1 billion to date in dividends to shareholders, and now want to sell off the London connection to make a £2 billion profit.

Admittedly, it took 'The Great Stink' in Victorian times for London to get a proper sewage system. Wales and the North-West got a network of reservoirs for greater water storage, but the push never continued on into storage expansion, or through the flush of distribution via aqueduct and river to drier parts downslope in East Anglia, London and the South-East.

Water engineers have looked again and again at the prospect of a national water distribution plan, and have published their proposals especially at times of greatest need. In 1942, for instance, a broad and deepwater canal scheme to follow the 300ft contour line from the Scottish borders to Hampshire was devised to improve transport and increase water supply to industrial centres and populated areas (see *The Projected Grand Contour Canal* book by J F Pownall for details the scheme).

Barry Rydz worked with the engineering team set up to assess water resources, reservoirs and pipeline supplies, following the 1976 dry summer; he still argues for proper investment in the necessary infrastructure. John Lawson of The Institute of Civil Engineers, adds that overall we are 'not short of water' and prepared plans are still viable for Welsh water to be transferred to the rivers Thames and Trent to supply eastern counties and the London area. It

would seem we have the resources and the skills, but not the will.

Such background information is important for the pressure needed to be put upon authorities to make appropriate investment. The population of London and the South-east is increasing at over one million every ten years; singles homes adding disproportionately to the pressure for space, brown or green. Government response via SEERA (South East England Regional Assembly) is to increase housing stock by 600,000 over the next 20 years, with the same again from the Eastern England Regional Assembly. Both regions are still the driest parts of Britain with overloaded demands and undersubscribed provisions. Yet the simplest of all measures to reduce water demand such as supply meters, are still not compulsory.

There is a slack in good governance which climate, population, building and an expanding economy easily aggravates – essentially it is those elected to run things, or their cohorts, who are responsible for a reasoned response. The House of Lords Science & Technology Committee in their recent review of Planning, emphasised that the 'ODPM failed to consult the water industry properly'. In the south-east alone, cost of dealing with an existing infrastructure deficit, amounts, it was calculated, to £45 billion: relative government spending currently stands at £0.29 billion per annum, or less than 7 per cent of what is really needed.

A Parliamentary Bill proposing an infrastructure audit for planning purposes was talked out by government backbenchers on 14th July: there could be a reprise 20th October when the bill returns for debate, that is, if there is enough pressure to force government to examine the consequences of underfunding and inappropriate commitment.

Fortunately, there have been some recent U-turns over government dogmas – such as the shelving of police amalgamations, the curtailment of Home Condition reports, the closing of an ineffective CSA – and perhaps, the grossly excessive house building targets, in spite of inadequate water provision, should make the next full scale correction.

There is surplus water in the west, insufficient water in the east. 'Turning off the tap while cleaning our teeth' is not the solution to a major water management

'challenge'. Engineers have surveyed, studied and suggested reservoir and distribution solutions. York Water turned themselves around from leak-league table worst to best, reducing their water losses by 40 per cent over ten years.

The oil industry cannot even tolerate the thought of leaks.

The pool industry is truly water dependent, so it was horrifying to read in 'Drought Orders Imposed' *ISPE Magazine* June 2006, p12 Vol 17, No 2, that 'Water can be purchased from other areas ... at £210 + VAT for 10m³ water delivered to a point near Brighton'. In other words, £1000 per poolfill. It might soon be better to take up scree gardening.

If it is up to government to plan and to provide proper infrastructure: it is up to us to see that they do it, very soon for all of our sakes.

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