The topic of water and its relative scarcity in south-eastern Australia has officially assumed the status of ‘barbeque-stopper’. Inflows into the tributaries of the Murray-Darling are the lowest on record, many urban centres are facing stringent water restrictions and irrigators have had to deal with low (or even zero) allocations. Adding to this bleak picture is the prospect of climate change bringing similar (or worse) events more frequently. Unquestionably, this has been compounded by the wider malaise in rural Australia which comes after decades of declining terms of trade and the associated, and usually difficult, adjustment. So why is the Federal government willing to take all this on?

Without wishing to repeat much of the excellent work of others who have considered the institutional history of water allocations in the M-DB, several hydrological and economic fundamentals have largely escaped consideration around the average barbeque. Arguably, if the conversation were more informed, the Federal government would be far less enthusiastic about dealing with the thorny issue of water management in the M-DB.

First, the M-DB has always had variable flows. Moreover, it is this variability that requires a given water storage in the M-DB to be roughly twice the capacity of the world average to generate an equivalent level of security. Put simply, dams in the M-DB need to be at least twice as big to provide the same surety as most other dams around the world.

Second, this variability places any industry that relies on secure water (like irrigation) at a significant economic disadvantage, unless of course it can shift some of those costs on to others in the community.

Third, regardless of the competitive disadvantage that attends irrigation in Australia, the social objectives enshrined in the development of a noble yeomanry, diligently transforming the arid inland into an agricultural oasis, were considered more important than economic common sense for most of the twentieth century.

However, the economic realities of the latter part of the twentieth century and the early twenty first century have brought historic approaches to water allocation and the role of agriculture generally under close scrutiny. The ABS has recently forecast that agricultural production will fall by almost 12% because of the current drought. This is expected to shave only 0.5% from national GDP - a minor hiccup compared to the drought-induced recessions experienced by earlier
generations. Arguably, if less water was presently allocated to agriculture the drought may have been endured with virtually no change in national output.

This is not to say that agriculture does not have a role to play in particular locations. Nor should we deny that we are able to benefit from hindsight. However, what needs to be acknowledged is the reality of current priorities and the fact that it is no longer tenable for one of the least productive sectors of the economy to retain control over almost two-thirds of the nation’s water resources.

Perhaps not surprisingly the irrigation lobby is reluctant to relinquish this control. To date they have successfully argued that the panacea to Australia’s water problem is to increase water-use efficiency and to produce higher value agricultural crops. Moreover, the irrigation sector has managed to secure significant public funds in return for mystical ‘water savings’. In addition, the irrigation lobby has supported the argument for more secure property rights over water and the establishment of a water market. Accordingly, licensing systems have been converted into tradable allocations. However, what is not widely known is that the irrigation lobby has accepted the increased surety of rights on the one hand but actively campaigned to limit the benefits of water markets on the other. Most irrigation districts have imposed rules that prohibit the trade of water away from irrigation. It would seem that stronger property rights are sanctioned by the irrigation lobby, but only so long as those rights are limited to their own constituents.

The dual arguments of ‘more pipes and drains’ to raise water-use efficiency accompanied by stronger property rights for irrigators have struck a chord with most politicians. Why? The answer lies in the fact that these issues can be easily re-shaped to avoid dealing seriously with the excessive water allocation to a sector in economic decline. Put simply, public funds can be politically assigned to purported ‘water-saving’ projects and this raises few objections. Similarly, few irrigators are likely to resist an enhancement in the status of their water rights – in these scenarios there are no obvious losers.

But there are less-overt and more troublesome costs. First, ‘water-saving’ projects are subject to diminishing returns. Most of the simple and cheap water savings have been realised and the current projects attract costs which are many times greater than the monetary cost of purchasing water in a market setting. Second, by limiting trade between agricultural and urban/industrial users the cost of water is artificially inflated in non-agricultural sectors. This produces a knock-on effect insomuch as extravagant engineering fixes for perceived urban water shortages appear more reasonable than they otherwise would be. Third, water restrictions imposed on urban communities become the norm. Anecdotally, urban water users have accepted the intrusion of government in this context although one suspects that voters would be less amenable if they were cognisant of the extent of the water allocation to irrigation. For instance, at the time of writing Victorian irrigators on the Murray River were enjoying a 95 percent
allocation. Urban communities drawing from the same river account for less than 3 percent of total extractions in that state and yet the zeal for water restrictions had resulted in their imposition in most towns. Under these arrangements urban communities effectively endure greater costs with no commensurate constraint required of irrigation. To the knowledge of the author no politicians have been keen to inform the residents of these towns that their lawns are dying so turf farmers can grow substitute turf.

Fourth, there are serious equity implications embedded in this policy approach. Not only do the perverse price effects of ‘water-saving’ projects lower total national income, the costs are borne disproportionately by the rural poor who are purportedly protected by these measures. Markets generally result in the lowest value users selling first. In this instance, less profitable farmers could be reasonably expected to sell their water rights before more profitable farmers. By insisting that water rights only be purchased as the ‘last resort’, the Federal government effectively condemns unprofitable farmers to continued poverty. Indulgent subsidies for ‘pipes and drains’ also stand to improve the capital value of more successful farms at the expense of the public purse. It is hard to reconcile this approach by any standard measure of equity.

To understand the magnitude of this problem, try substituting labour for water into the above equation. To do so requires that we imagine an economy where two-thirds of the population are employed in agriculture and constraints are put in place to prevent people leaving farming jobs for better-paying vacancies elsewhere. Moreover, the argument invoked to keep people in these low-paying jobs is that all we need to do is pay subsidies to the owners of agricultural land and all will be well. No serious consideration would be given to such a policy approach because everyone would realise that this is akin to keeping the majority of people in poverty so that a few wealthy farmers can retain access to cheap labour. Even the most ‘lubricated’ barbeque goer would see the folly of this argument.

But water is supposedly different. Which is precisely why politicians like to meddle with its allocation so they can be seen to ‘make it rain’ or produce a ‘rabbit from a hat’.

So what does the future look like with the Federal government in control of the M-DB water resources? The credentials of the Federal government to manage these problems are certainly no more auspicious than most state authorities. Under the National Water Initiative $2 billion was set aside to enhance the allocation and use of Australia’s water resources. The funds are administered by the National Water Commission but the way the funds have been carved up is particularly revealing. Most of these monies ($1.6 billion) are tagged for the euphemistically-named ‘Water Smart Australia’ program. From an economist’s standpoint it is difficult to find the ‘smarts’ in this package. Almost all of this funding is ear-marked for technical fixes like ‘improvements in irrigation
infrastructure’ or ‘advanced efficiency improvements for on-farm water use’, thus reflecting the penchant for this type of approach. Strikingly, the Federal government has bemoaned the slow uptake of these programs by the states. Arguably, many of the states may have already realised the limitations that attend initiatives of this genre.

In addition to the high price tag that accompanies technological ‘water-saving’ fixes there is also limited acknowledgement of how water systems operate in a physical sense. When a piece of infrastructure reduces purported ‘losses’ what it is really doing is moving water from one location (or beneficiary) to another. In the M-DB much of the water that ‘escapes’ or is supposedly ‘wasted’ in transit does not disappear per se – it is simply used by another party, often in the form of environmental flows. Take the case of Wangaratta in Victoria’s north-east which draws its water supply from the Ovens River. Currently, because of the very low flows in the Ovens it is necessary to release about 6 megalitres from Lake Buffalo to supply 1 megalitre of urban water to Wangaratta. Engineering gurus are queuing up to solve this ‘waste’ by piping water directly to the city (at an estimated cost of $65 million). Of course what this ignores is the fact that the 5 megalitres ‘lost’ undoubtedly underpins the base-line flows to maintain the riverine environment and probably many of the groundwater extractions that occur between the dam and the town. Put simply, piping water in this instance does not ‘create water’ or ‘save water’ it simply takes it from one user and redistributes it to another. The same applies for many on-farm water savings. When reviewing the impact of improved irrigation efficiency in the Riverland in South Australia, Engineering Australia found that a 10 percent increase in on-farm water efficiency (from 80 to 90 percent) actually reduced return flows to the river by 22 percent. Whilst there may be some environmental improvements (in the form of reduced salinity) this hardly ‘creates water’. What it does do is provide ample photo opportunities and the illusion of a politician fixing a problem.

Arguably, the Federal government is well placed to resolve many of the problems that attend water allocation in the M-DB. It holds a non-trivial surplus and still has access to significant funds set aside as part of the National Water Initiative, largely because the states have often found it easier to use their own monies. Used wisely and by incorporating appropriate market instruments this could go a long way to resolving some of the long-standing economic and environmental ills in the Basin. Of course the danger is that much of the money is likely to be wasted, from an economic standpoint at least, particularly with an election due later this year. However, given the status of many barbeque conversations, Australians may be duped into believing that Federal politicians really can make it rain. On the basis of the evidence to date, the prospect of a miracle of this kind seems more likely than any emergence of sensible water policy brought about by substituting one form of the policy for another.