

Submission: 2009 Biennial Assessment Discussion Paper: Urban Water

I am writing this Submission as a resident of Melbourne, Victoria who is concerned at the inability of Governments, in particular the Victorian Government, to address this most fundamental of human needs, and Australia's top environmental problem - that of the supply of safe and affordable water. Furthermore, I am also interested in policies which ensure the optimum allocation of scarce resources.

Introduction

In formulating a water policy, a number of factors must be taken into account. The first of these is the environment in which these policies would be applied. Here there are two possible scenarios, one reflecting a long term structural (or even a catastrophic) change in climate and the other, an ongoing drought, perhaps for another decade or two. Robust policies should be such as to be applicable in both scenarios, though current practice by Governments is confined to a typical drought scenario, thereby lessening their ability to cope with surprises in the future.

The second factor is the creation of signals of, and for, change. Here I fully support the approach by the National Water Commission in the use of markets, as these give the least cost, most equitable outcome. Furthermore, effective and efficient markets can create supply to meet demand, improve the efficiency of use and find lower cost alternatives or substitutes. These are driven by price and quality, as well as by science and technology.

Unfortunately, it is not possible to have a true market in Australia, as supply has been the monopoly of governments, which have used much of the surplus cash generated by these activities for other government purposes. In other words, a market, by definition, can not comprise many customers with only a single supplier. Water price has been set at a politically acceptable level. As a result, the industry has been starved of capital for many decades. Our 'markets', despite corporatisation of their management, have failed our consumers.

Market structure

I would like to start my Submission by addressing the issue of 'markets', for until a better approximation to a market has been created, the current approach will not result in a sustainable supply of safe and affordable water.

Some may argue that water is a natural government monopoly. I would leave that debate to the economists. Yet we do now have choice in transport, electricity, education and health, all formerly (predominantly) government monopolies and there are no philosophical reasons why the management of water should be any

different, for it is already successfully in private hands in a number of other countries.

In simple terms, there are three different markets for water:

1. Agriculture, where pricing is being introduced by the NWI,
2. The urban market, which is politically too difficult to reform at this stage, despite the fact that the disadvantaged can readily be compensated by the welfare system and represents but a small proportion of the total industry and
3. The industrial/commercial market, an equally small proportion, but which can be privatised immediately.

Industry can make all of the water required for its needs, for proven commercial technology is readily available. It can also use alternatives such as air cooling, as well as apply non-potable water replacements for cooling electricity generation turbine exhaust and air conditioners, as well as other process streams. It can also create new sources of process water. But it must be allowed to recover the costs of that investment and be given the incentive by regulations.

Moreover, most of the treated sewerage water is lost in the sea. Why not auction it to the private sector with the right to sell it as potable, industrial and agricultural water, providing all quality criteria are met after treatment? After all, Governments value this stream presently at zero, yet have not been prepared to upgrade it themselves. This business would then create a second water distribution network, which Governments have been unwilling to build. That would be the true beginnings and the foundation of a public/private market.

In the meantime, there is a strong case for regulation of the quality of all effluents, including agricultural run-off, sewerage, hospital effluents and industrial and agricultural process water. They all could then become feedstock for further upgrading, as well as creating a useful new source of supply. The release of all polluted water should be stopped on land and rivers as well as into the sea.

The current water price seems to be set at a level which shields consumers from the true cost and hence does not provide an incentive to change behaviour or capital for investment. The price of water should be set at a level which can recover the cost of capital, as well as contribute to the cost of risk attached to that investment and provide a modest dividend to the investor. This would create sustainable agricultural and urban water industries but, in particular, address the issue of the very high evaporation and seepage losses experienced in the irrigation channels, which do not appear to respond readily to current price signals. Which industry could or would otherwise allow the loss of roughly half of its input? Australia has shown very high growth of irrigated agriculture, one of the highest in the OECD. One wonders about the role played by the very low price of water and the long term sustainability of such agriculture?

The final essential element of a market is information, correct real-time price and water quality information, just as it is available for all other commodities. Signals may be further reinforced by global comparisons. Yet such information is not readily available.

Water policy has been a conspicuous failure of this critical public policy issue. This failure by the Governments to meet their obligations to the people must be addressed, one way or another, as a matter of some urgency but I am encouraged by the belated recognition of this problem.

The Victorian Government has at last been forced to implement some poorly considered and high energy and capital cost supply measures for urban water, which may or may not be built. Yet the Victorian water authorities are now seeking a price rise on the grounds of declining demand due to the effects of water rationing? What a ludicrous response by a failed management! The progress on building an agricultural water pipeline grid has been remarkably slow. One must question whether this Government is really serious about addressing the problem?

Conclusions

1. A market driven approach, the optimum approach, will only work if there is a genuine market. Such a market can be created by the sale of effluents currently being dumped into the sea and the rivers to the private sector for upgrading to urban, industrial and agricultural water quality.
2. Present price and quality signals do not provide adequate signals or incentive for investment .Price must reflect the true cost of developing and running that business and consumers must not be shielded from reality.

Stakeholder Views

Question 11.1. To what extent have the specific demand management reforms undertaken under the NWI been successful or not?

Answer: It is not evident that NWI has made any impact. Victoria has had a drought for over a decade and it took some years for the Government to accept that fact. Water rationing was then introduced. The reserves have now declined by roughly half to 34% of capacity. No new sources of supply have been created in this time, nor have losses been reduced and there is no evidence, from even the latest of a series of plans, that rationing will ever be abandoned.

Question 11.2. What has been the impact of water restrictions in managing water supply security, and what evidence is there to support your view?

Answer: Long term rationing is the worst possible policy option, for it does not provide the incentive for new supply, it does not encourage efficiency other than

by force of law and it does not provide any incentive to develop substitutes or alternatives. It also discourages R&D. Furthermore, it encourages the uptake of the full (gardening) ration, thereby actually increasing demand and the creation of lists of the 'exempt'. Evidence for the failure of rationing as a long term policy is provided by the ever declining water reserves in Victoria, which, apart from reducing any illusions of security, have also wasted valuable time to implement an effective policy, time which can not be reclaimed.

Question 11.3. In what ways do you think the community can be more effectively engaged and consulted in setting the levels of service for urban water supplies?

Answer: Consistent failure by Governments to implement a water policy has resulted in the emergence of polarised and highly emotional views as to how the problems should now be tackled, indeed, what are the problems? There are six issues:

1. Australia's low or very low water prices are not sustainable, for they are some of the world's lowest. Prices must therefore increase.
2. The use of appropriately treated water is universally an accepted solution but totally rejected in the capitals and some regional cities of Australia. This is central to a sustainable urban water supply.
3. Population growth, urbanisation and economic growth will continue to put pressure upon naturally available supplies but there is no long term integrated planning for investment in infrastructure.
4. The introduction of sustainable agriculture and with that a restructuring of rural and regional Victoria is inevitable. Its cost will be lower if managed rather than as the outcome of an ongoing drought.
5. Water rationing is not an acceptable long term urban water policy.
6. The community must be forced to convert from septic to sewerage systems in the community's interest in order to improve river water quality.

Clearly, these are complex social and political issues which are unlikely to be resolved by 'education', the usual refuge for the consultant and the academic. Ongoing drought will solve some, may be common sense will solve others.

It is time for bi-partisan leadership in this area, based on a science and economics led policy by the Federal Government and implemented by the State Governments as appropriate. That would include all agricultural, urban and industrial water.

Question 11.4. Taking into account both NWI reforms and other major initiatives by jurisdictions, are there major gaps or issues that need to be addressed by governments to create water sensitive cities?

Answer: The Victorian Government's water plans appear to address the problems of the past decade, not those of a medium term future when there will be at least another million Victorians. (That comment applies to all infrastructure.)

There are two critical gaps to be filled:

1. Introduction of long term planning with qualified staff, not the pseudo scientists and para professionals currently employed, ie a rebuilding of the skills base of the relevant Government departments.
2. Acceptance of the already and universally used practice of recycled treated water, for only then will our cities become 'sustainable'. The majority of the urban water will have to be recycled in a sustainable world, with losses/seepage, with gardening needs and with the provision for population and economic growth being made up by desal plants, which might also provide some water for rebuilding stocks.

Question 11.5. Has there been adequate progress in developing alternative water sources for urban supply, or is there need to consider further action in this area?

Answer: There has been zero progress in developing alternative water supplies in Victoria as of now. (See Answer to Question 11.4). Given the current pressure on Federal and State budgets, it would seem unlikely that many of the present and future water needs will now be met, as available funds will be directed towards providing short term economic stimuli rather than addressing long term structural needs, as has been demonstrated by government practice to date. Furthermore, the private sector is even under greater pressure and the likelihood of PPPs is remote. Hence finance (and crises) may become the main driver for a water policy.

Question 11.6. Broader NWI planning principles apply in the urban context, with specific commitment to progress Integrated Urban Water Cycle Planning and Management. To what extent do you think current water planning meets NWI principles and objectives?

Answer: Water planning will be only successful if it is integrated with town and transport planning at the state, city and municipality level, and then translated into budgets and regulations which are enforced. Governments have so far refused to implement this integrated systems approach, which is also relevant to energy policy and its link to climate policy. Principles, as such, remain only of academic interest and have zero impact.

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