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## **Urban Water Policy in Australia: Supply, Demand and Industry Structure**

Submission to the Productivity Commission Urban Water Inquiry

**John Quiggin**

**Australian Research Council Federation Fellow  
Risk and Sustainable Management Group  
School of Economics and School of Political Science and  
International Studies  
University of Queensland**

**EMAIL [j.quiggin@uq.edu.au](mailto:j.quiggin@uq.edu.au)**

**PHONE + 61 7 3346 9646**

**FAX +61 7 3365 7299**

**<http://www.uq.edu.au/economics/johnquiggin>**

This submission is based on extensive work on water policy in Australia, as listed in the references. The policy conclusions listed refer to supply, demand and industry structure

## **Supply**

- \* Scope to enhance urban water supply through new dams is limited or non-existent for most Australian cities
- \* Proposals to supply additional water through long-distance transport (from Northern Australia, or by transporting icebergs from Antarctica) are not cost-effective
- \* Where it is technologically, feasible, purchase of water from the irrigation sector is likely to be the least-cost option
- \* Generating additional water supplies through improvements in technical efficiency in irrigation (as in Food Bowl Modernisation project) has proved highly ineffective
- \* Scope for recycling largely unexploited (Brisbane plant constructed but not used so far).
- \* For coastal cities (most major Australian cities) desalination is an essentially unlimited backstop option, although siting problems may constrain expansion
- \* It appears long-run marginal cost of water supply from desal/recycling is less than \$2/kl. This cost may be increased if electricity costs rise, but even assuming complete reliance on renewable energy generated on site, cost is unlikely to exceed \$3/kl
- \* Water supply is unlikely to prove a binding constraint on growth of Australian urban population

## **Demand**

Need to balance efficiency, equity, community acceptance. Optimal pricing scheme

- \* Free individual allowance sufficient for basic human needs: drinking, washing clothes, showers
- \* SRMC pricing over course of planned capacity expansions,
- \* Combined level set to allow full cost recovery over the course of an investment cycle
- \* No need for concern about whether individual connection prices are cost-reflective, since these are non-discretionary
- \* Usage restrictions should be imposed only to deal with unexpected and unplanned water shortages (eg drought of early 2000s)
- \* Investigate time-of-day pricing in relation to peak-demand effects on cost of distribution infrastructure (in absence of time-of-day pricing, some restrictions on use at peak times may be justified).
- \* Requirements for water-efficient technology may be justified by information problems, but must be shown to be cost-effective

## **Industry restructuring**

- \* Current proposals for industry restructuring and introduction of competition are poorly thought out and likely to be counterproductive
- \* Unthinking adoption of structure modelled on electricity, despite the very different supply and demand characteristics associated with electricity (storable only at high cost, and transportable at low cost) and water (storable at low cost, but with high transport cost).
- \* Use of failed PPP models, particularly with take-or-pay contracts, produces spurious budgetary benefits but increased long-term costs

\* proposals for reform raise the possibility of more flexible price-quality offerings, they take little account of the way in which these offerings will be affected by demand management policies and in particular by the imposition of restrictions on water use.

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