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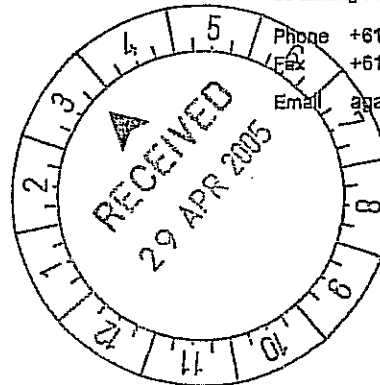
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Inquiry on Urban Water and Wastewater Pricing  
Economic Regulation Authority  
Level 6 Governor Stirling Tower  
197 St George's Terrace  
PERTH WA 6000



This is a submission regarding the consideration of environmental externalities in the Draft Report of the Authority published on 18 March 2005.

I wish to comment on the various propositions summarised at pp.6-7, in the Executive Summary. My comments are made in the light of the statement by the National Competition Council in its report on the 2004 National Competition Policy assessment on water, section 1.1:

<http://www.ncc.gov.au/articleZone.asp?articleZoneID=525>.

"..., the Council has interpreted the metropolitan pricing obligation under the National Water Initiative as requiring businesses, by 2008, to set prices to recover costs at least at a level close to (if not at) the upper bound full cost recovery. Water and wastewater pricing that achieves only lower bound cost recovery by 2008, without significant movement towards upper bound cost recovery, would not satisfactorily address pricing obligations because such pricing would indicate that the water business is failing to recover significant elements of efficient resource and business costs (including the cost of capital). Upper bound costs should be determined, transparently reported, and in cases where water businesses do not recover upper bound costs, under recovery recognised as a subsidy."

The NCC defined "lower bound cost recovery" to include "externality costs (defined as the natural resource management costs incurred by, and attributable to, a water business)", and "upper bound cost recovery" to include "externality costs (the positive and negative environmental externalities associated with water use)". The lower bound externality costs would include the costs of water resource management by a regulatory agency; whereas the upper bound externality costs would include those costs plus the costs (and benefits) imposed on third parties and the public interest.

Although Western Australia is not yet a signatory to the National Water Initiative, it is strongly arguable that the NCC definitions of lower and higher bound cost recovery fall within the definition and obligations of "full cost recovery" envisaged by the 1994 CoAG framework agreement on water reform, to which Western Australia is a signatory. Western Australia should, in any case, be aiming to move towards upper bound costs recovery by 2008. As the Authority proposes a regulatory period of 3 years, 2008 is within the regulatory period envisaged in this draft report.

Submission to Economic Regulation Authority on Water Pricing by Alex Gardner, UWA Law School

1) Water resource management costs

**The Draft Report** "The Authority is of the view that it would be reasonable to pass on to customers those resource management costs that are directly attributable to current consumption activities."

I agree with this view of the Authority. At least, water resource management costs should be passed on to consumers by recovering from water suppliers (perhaps by licence fees) the regulatory agency's costs of water resource management.

2) Costs of repairing environmental damage

**The Draft Report** "The cost of repairing any damage caused by supply decisions made in the past might be better funded by Government."

I disagree with this statement as a general proposition, though it may be applicable in certain, even many, instances for reasons of administrative efficiency. However, in certain situations, the Government should endeavour to recover from water consumers the costs of repairing damage incurred as a result of past water use decisions. Consumers have benefited, and will benefit, from past water use decisions pending implementation of steps to repair damage, so they should pay the cost.

South Australia has introduced a "Save the River Murray Levy" on SA Water customers,<sup>1</sup> which aims to contribute to restoring the health of the River Murray over time. Western Australia should consider introducing a similar levy to pay for programs aimed at restoring the health of certain water resources. This should be considered as an option for paying for the work to be done with Gnangara Mound (eg. supplementing environmental water to Yanchep caves) and similarly over-allocated water resources.

3) Internalising other environmental costs

**The Draft Report** "In principle, there is economic justification for using pricing to internalise other environmental costs such as the impact of reduced natural stream flow and lower groundwater levels that are not currently being addressed by environmental programs. However, in Western Australia, not enough is known about these costs to establish a measurable and defensible externality charge."

I disagree with this view as it clearly does not meet the national aspirations that WA should share. The Authority should, at least, be strongly endorsing the principle and recommending pricing trials so that WA can learn how to internalise third party environmental externalities. For example, the Authority should state that the principle should apply to any new inter-basin water diversion, such as the proposal to divert water from the South West Yarragadee aquifer to the Metropolitan area. Such a proposal cannot be properly and comparatively costed without consideration of third party environmental costs.

Also, it is well recognized that, whilst there are difficulties in explicitly pricing third party environmental costs, there are alternative "second best" pricing techniques that can be used to send pricing signals.<sup>2</sup> These pricing signals can appropriately indicate water scarcity, both seasonal and during the summer drought period when much metropolitan water usage is directed at maintaining gardens, not at essential human wellbeing. With respect, the arguments at p.162 of the Draft Report against using seasonal pricing are not compelling and the earlier discussion in the report is too optimistic about the prospect of establishing alternative supplies at low costs, including external costs.

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1 South Australia, Transparency Statement, Water and Wastewater Prices in Metropolitan and Regional South Australia, 2005-06, p.35.

2 Hatton, McDonald, Young & Connor (CSIRO Land & Water Policy and Economic Research Unit), Pricing Water – A Tool for Natural Resource Management in the Onkaparinga Catchment, 2001, p.22.

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One technique to reflect scarcity would be a summer peak pricing surcharge on higher volume users to act as a price signal to reduce consumption.<sup>3</sup> A CSIRO Land and Water Report has suggested a surcharge of 30% for Adelaide summer water supply based on some experience in the United States.<sup>4</sup> The Authority should recommend a similar approach for Western Australia.

Further, a crucial aspect of pricing for third party environmental costs requires recognition of seasonal scarcity in water supply and respect for a proper environmental water allocation. As Zilberman and Schoengold say:<sup>5</sup> "The value of water is determined in part according to its scarcity and will be greater during times of drought than in seasons with high precipitation. An optimal water [pricing] policy will have to be flexible enough to take account of this seasonal or annual variation in supply."

The procedures for determining environmental water allocations and the volume of water available on a seasonal basis lie outside the pricing mechanisms and, perhaps, the Authority's terms of reference. However, the Authority's recommendations should take account of the need for seasonal variation in water pricing that reflects the seasonal availability of water. Currently, Western Australian water law and management are not well developed for making authoritative seasonal determinations of the available water supply. This is especially true for our ground water sources, which are now the major source for Metropolitan water supply. A simple illustration of this deficiency can be seen in the weekly publication by the Water Corporation of "The Gurus gauge our water use". The diagram indicates an annual target for total water use but only indicates the level of water storage in our surface water dams. It does not indicate the declining levels of ground water sources. We have for years been overdrawing our ground water sources because there have not been authoritative limits on abstraction of water from them. Urgent reforms of our law and management practices are required to institute binding annual available water determinations for municipal water supply, including from our ground water sources.

The Authority's report and recommendations should anticipate the need for such reforms. The Water Corporation, at least, should have the capacity to adjust the price of water to reflect seasonal scarcity. It should have the authority to charge a higher price in dry seasons so as to reduce water consumption to meet reduced availability targets and to recover adequate revenue from an expected reduction in consumption. The need for this pricing flexibility will be greater as water pricing moves to a lower fixed component and greater usage component, as the Authority recommends. When a water market is properly instituted for private irrigators, they will have to pay more in dry seasons to purchase water. There is no reason why commercial and residential users dependent on municipal supply systems should not be subject to the same market discipline.

I would be pleased to have the opportunity to discuss this submission.

Yours sincerely

  
Alex Gardner

(with research assistance from Vivian Chung, LLB student)

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3 Hatton, McDonald, Young & Connor (CSIRO Land & Water Policy and Economic Research Unit), *Pricing Water – A Tool for Natural Resource Management in the Onkaparinga Catchment*, 2001, p.5.

4 *Ibid*, p.24.

5 D Zilberman & K Schoengold, "The Use of Pricing and Markets for Water Allocation" (2005) 30(1) *Canadian Water Resources Journal* 1-10, at 7.