Dear Sir/Ms

I would like to respond to the request for community comment about the ICRC’s Draft Report *Enlarged Cotter Dam – Water Security Project*. Please see the attached submission.

Thank you for your consideration.

Yours sincerely

Jane O’Donohue
28 May 2010
ICRC Draft Report *Enlarged Cotter Dam Water Security Project: comment*

Cost-benefit assessment requires a clear statement of objective and adequate consideration of all relevant options to achieve that objective.

The water security objective for the ACT has been expressed as ‘one year in 20 in temporary water restrictions’ (ICRC 2010, p. 2). Cost-benefit assessment is an appropriate means to decide between options to meet this objective, and ACTEW’s use of Net Economic Benefit (NEB) is supported.


While the draft report considers ACTEW appraisal of supply options, my research in 2008 at the ANU considered the use of price rather than restrictions to limit demand for water at times of scarcity. It found the following:

- Consumers of water consider its price when they decide on how much to use. ACTEW has estimated a price elasticity of -0.22, and the ICRC’s estimate of long-run elasticity is -0.39 (ICRC 2004, p. 117).

- At times of water scarcity, using price to manage water use instead of water restrictions is desirable for two reasons: firstly, it allows individual households to use water where and when they most value it; secondly, it allows those households who value water highly – such as those who buy rainwater tanks – to buy more mains water during times of scarcity, while those who value it less avoid the inconvenience of water restrictions. Aligning these marginal values to the price paid is important for economic efficiency.
Economic analysis demonstrates that a two-part tariff comprising a fixed annual fee and a single volumetric charge which reflects current and expected availability of water is both efficient and fair, and can also achieve water conservation objectives (Sibly 2006, p. 29).

The value to Sydney households under a regime of “scarcity” pricing instead of outdoor water use restrictions has been estimated to be over $200 million over a 12 month period, while allowing for the range of possible values for the cost of substitutes such as rainwater tanks and for the price responsiveness of demand, the estimated value ranges from $36 million to $362 million (Grafton and Ward 2008, S63). (These and related findings were noted in Professor Grafton’s presentation to the ACT Water Workshop in March 2009, at http://www.actpla.act.gov.au/__data/assets/pdf_file/0008/13400/Grafton_ACT_water_workshop_presentation.pdf)

Similar analysis for the ACT, based on 2004-05 data, found that the value to the community of replacing outdoor water restrictions by scarcity pricing to achieve the same 30 per cent reduction in use would have been over $30 million, under reasonable assumptions about the price of alternatives and for the price responsiveness of demand (O’Donohue 2008, p. 35). The gains would have been higher for those with higher outdoor water use, particularly those in separate dwellings.

This estimate for the ACT understates the gains to the community of removing water restrictions because it does not also take into account the further gains for households in the same type of dwelling who have different valuations for water use — some have estimated these impacts to be even more substantial than the benefits of being able to substitute outdoor water use for indoor use (Mansur and Olmstead 2006, pp. 1-2).
Scarcity pricing would increase water costs for all users, including those in flats who would benefit little from the removal of water restrictions. However, my estimates are that the additional revenues to ACTEW, if redistributed on a per household basis, would more than compensate flat dwellers as well as many of those in semi-detached dwellings for the higher water prices at times of scarcity.

In concluding, I note that these comments draw largely on those submitted to the ACT Planning and Land Authority in July 2009 in relation to Development Application 200915041.
References


ICRC (Independent Competition and Regulatory Commission) 2004, Investigation into prices for water and wastewater services for the ACT: Final Report and Price Direction, March.


