Towards urban water reform: a discussion paper

Commission Research Paper
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Where we are today

- 80% of city dwellers subject to water restrictions
- Not just low rainfall, but also policy choices
- There is no urban water market
  - *Urban water provision is centralised*
  - *Charges don’t vary in response to scarcity*
  - *Urban and rural water are functionally separate*
Impact of water restrictions

- Impacts on business and the community, but especially households

Water use in Australian households pre- and post restrictions

- Bathroom 20%
- Toilet 15%
- Laundry 13%
- Kitchen 8%
- Outdoors 44%

2000-01

2004-05
Hidden cost of restrictions

- Estimate for Sydney — $150 per household
- But this excludes MANY costs
- Annual cost to Australian households likely to be in $billions
Improving pricing

- Scarcity-based pricing to ration demand
- Prices could $\uparrow$ as dam levels $\downarrow$
- During a long drought prices might $\uparrow$ gradually over several years and then $\downarrow$ during a season of high rains
- Need to address metering and billing
Rural-urban water trading

- Of total water consumption, agriculture takes around 60–70% and households around 10%
- Small diversions from rural use could make major (and relatively low-cost) contributions to urban supplementation
- Trade-offs: coverage and transactions costs
Structural reform

Integrated monopoly model
- Bulk water supplier
- Treatment
- Distributor
- Retailer
- Customer
- Wastewater

Disaggregated competitive model
- Bulk water supplier 1 (eg dam 1)
- Bulk water supplier 2 (eg dam 2 including water from rural areas)
- Bulk water supplier 3 (eg desalination)
- Bulk water supplier 4 (eg recycling plant)
- Treatment
- Distribution
- Retailer 1
- Retailer 2
- Retailer 3
- Customer
- Wastewater
Potential payoffs from reform

- Revealed costs, prices and valuations of water security
- Better informed and more timely investment signals
- Competitive pressures leading firms to perform better
- Mutually beneficial market trades permitting water resources to go to higher valued uses
- ‘Democratisation’ of water use
What about equity?

- Low-income households spend less than $1 per day on urban water
- Restrictions on water use are indiscriminate
  - Poorer residents can’t afford alternatives (e.g. re-use systems) to mitigate the damage from restrictions
- Better to use targeted measures
The challenge

- The *direction* for reform seems clear
- But no ‘off the shelf’ solutions
- A reform agenda would be most effectively advanced through a comprehensive public review
- COAG’s NWI could be the vehicle to reignite momentum for urban water reform
The discussion paper

- Available at: www.pc.gov.au
- Go to ‘What’s new’