



**WATER SERVICES ASSOCIATION  
OF AUSTRALIA**

13 July 2010

Infrastructure Australia  
Level 21, 126 Phillip Street  
Sydney NSW 2000

Dear Sir/Madam

Thank you for the opportunity of providing comments on the 'Review of Urban Water Security Strategies' May 2010 commissioned by Infrastructure Australia and prepared by PricewaterhouseCoopers.

WSAA's 29 members and 26 associate members provide water and sewerage services to approximately 16 million Australians and to many of our largest industrial and commercial enterprises.

WSAA was formed in 1995 to provide a forum for debate on issues important to the urban water industry and to be a focal point for communicating the industry's views. WSAA encourages the exchange of information and cooperation between its members so that the industry has a culture of continuous improvement and is always receptive to new ideas.

The functions of WSAA are:

- be the voice of the urban industry at the national and international level and represent the industry in the development of national water policy,
- facilitate the exchange of information and communication within the industry,
- undertake research of national importance to the Australian urban water industry and coordinate key national research for the industry,
- develop benchmarking and improvement activities to facilitate the development and improved productivity of the industry,
- develop national codes of practice for water and sewerage systems,
- assess new products relating to water, sewerage and trade waste systems on behalf of the water industry,
- jointly oversee the Smart Approved Watermark Scheme for products and services involved in conserving water use
- coordinate annual metric benchmarking of the industry and publish the National Performance Report with the Federal and State Governments.

Overall, WSAA supports the broad thrust of the recommendations contained in the report. We note that many of the recommendations in this report have been alluded to in several other reports prepared over the last two years.

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Before addressing the individual recommendations I would like to make a number of general comments:

1. The report does not acknowledge the massive change that has taken place in the urban water industry over the last decade. Between 2006 and 2012 the Australian urban water industry will have invested \$14 billion in new rainfall independent sources of water to mitigate climate change risks. This significant investment does not include the investment undertaken in other aspects of the water supply system and of course investment in the wastewater system. Constructing a diverse portfolio of water supply options in less than decade for all of the mainland coastal capital cities, with the exception of Darwin, is a major undertaking and yet the urban water industry was able to deliver on all of its other commitments to customers and the environment. At the same time, the industry was preparing itself to be ready to operate in a carbon constrained world. I believe that this speaks volumes for the professionalism and the technological capability of the industry to respond promptly and to deliver an unprecedented capital expenditure program when there were so many other pressing issues to deal with. In other words, the large urban water utility model is definitely not broken but that does not mean that further reforms are not required to ensure the industry is on a secure footing which will enable it to meet the challenges of the future.
2. It is not clear from the report whether the scope of study was restricted to the large government business enterprise water utilities or also included the smaller local government managed water utilities especially in New South Wales and Queensland. If the scope did include local government utilities the report is silent on reforms that would assist these utilities to confront the challenges of the 21<sup>st</sup> century. In many respects, the 'low hanging fruit' of urban water reform resides in reforming the smaller water utilities given that urban water is largely a fixed cost industry and economies of scale are achieved through entities becoming larger.
3. On page 10 one of the drivers for reform is alleged to be 'a legacy of under investment in the water industry', albeit without specifying how long the period of under investment lasted. The irony here is that up until climate change hit Australia, one of the more frequent criticisms levelled at the urban water industry was that it 'gold plated' its systems as a result of the dominant engineering culture that existed in utilities in that era. In retrospect, if there was gold plating, it turned out to be rather fortuitous.

The point generally forgotten is that climate change hit the urban water industry at a speed and severity that none of the climate change specialists anticipated. The industry waited until the signals that the climate had changed were so pronounced before starting a massive capital investment program to diversify sources of water for our cities. Nowhere have I seen any evidence that greater private sector involvement would have triggered early investment decisions. Even though harsh water restrictions were placed on most urban communities none of the cities ran out of water and the community was always supplied with drinking water that met national water quality guidelines.

4. On page 18 it is stated that there is no standard system or method across the nation for defining supply buffers and sustainable yield. This appears to ignore the fact that a "one size fits all" method would be inappropriate. The reality is that climate change has resulted in more extreme rainfall events at both ends of the spectrum. Prior to climate change, rainfall was relatively reliable compared to today and water utilities were able to calculate a sustainable yield relevant to their supply sources. The 'X' factor always in a sustainable yield calculation is

rainfall and over the last 15 years the industry has learnt that just when you think the rainfall deficiency can't get any worse, it does. This has made the calculation of sustainable yields problematic. However, as there is a change towards rainfall independent sources of water such as desalination and recycled water, and the use of more sophisticated climate models, the calculation of sustainable yields may be able again to be undertaken.

5. On page 25, bullet point 3, under the heading 'Gold Plating' it is stated that there 'been a tendency for water businesses, with support of governments to select expensive and lumpy infrastructure projects' (in spite of the assertion on page 10 that there has been long-term under investment). The inference here is that a suite of smaller more local solutions could have been the answer to rapidly declining dam levels at this time. Small local solutions have their place in a diversified water supply portfolio but they generally depend on rainfall which makes them high risk in an era of climate change. This is especially the case with stormwater reuse schemes. Desalination plants and recycled water schemes have the great virtue of being independent of rainfall and are a core component of investment in a diversified portfolio of water source options. By virtue of their nature, desalination and recycled water schemes are expensive and lumpy.
  
6. Although this report concentrates principally on urban water supplies, it must never be forgotten that the management of wastewater services are also a major component of a water utility's responsibility. The wastewater system is a major consumer of capital, particularly in relation to environmental performance of treatment plants. In an era of integrated urban water management, wastewater treatment plants will be a major source of recycled water whilst generating renewable energy as a by-product of the treatment process.

I now wish to address each of the recommendations contained in the report.

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| <p><b>Recommendation 1</b><br/> <i>Investigate improved institutional structures for centralising planning and bulk water procurement functions, with the objective of bringing together all the levers for achieving security of supply under the one roof.</i></p> | <p>WSAA is ambivalent about this recommendation.</p> <p>In many respects this recommendation is best suited for a by-gone era when water security was delivered via a handful of large sources of supply. The situation we face now is much different, more complex and further change is inevitable. We are now in an era where the risks associated with ensuring security of supply are devolving. In the future, the responsibility for planning for water security of supply should be handled at a level commensurate with the capacity for managing risk. For example:</p> <ul style="list-style-type: none"> <li>• A central government agency might look after bulk supply augmentations and contingency planning (particularly while we are still highly climate dependent as they are the only level with the capacity to manage climatic risk);</li> <li>• Individual water agencies might develop Integrated Water Management Plans in collaboration with relevant partners at a catchment or precinct level. Such plans would have a granularity to enable them to meet future localised land use planning outcomes, as well as aim to achieve multiple outcomes, beyond just water security (e.g. environmental water quality outcomes, social benefits, perhaps even flood mitigation). The water agencies or utilities have the best understanding of</li> </ul> |
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|  | <p>customer need, localised infrastructure requirements and localised land use planning outcomes, as well as having a capacity to collaborate with others in their region who might have some responsibility for parts of the water cycle;</p> <ul style="list-style-type: none"> <li>• Individual stakeholders like developers, customers, local governments and the like now have a capacity to make a lot of decisions to influence their own water destiny. For example, developers now have a range of options available to them to at least partially manage their own water security such as localised stormwater harvesting or recycled water use. Likewise local governments and customers.</li> </ul> <p>A future model would need to centralise certain key functions such as the collation and dissemination of information and data to facilitate good planning decisions at the above various levels. A Bureau of Meteorology model for major urban centres (cities) would be very useful and powerful too so we have a systems perspective matters such as the rapidly evolving decentralised systems and the overall urban water balance. In summary, this recommendation fails to take into account the complexity of the environment that water utilities now operate in.</p> <p>It is important to acknowledge the substantive reliance of some jurisdictions on groundwater supplies for potable sources (such as Perth) and the fundamental economic, technical and governance differences that exist with securing these sources.</p> |
| <p><b>Recommendation 2</b><br/><i>Preparation of comprehensive national guidelines for urban water planning.</i></p>   | <p>WSAA supports this recommendation, so long as the guidelines are flexible enough to take account of regional variations</p> <p>Having said that, it is worth noting that all of the major capital cities have water resources plans that go out to at least 2050.</p> <p>It would be interesting to understand if such long-term plans exist for smaller local government owned water utilities.</p>   |
| <p><b>Recommendation 3</b><br/><i>Develop national guidelines on defining, measuring and reporting water security objectives and targets.</i></p>                                | <p>WSAA supports this recommendation provided that differences in water supply systems are taken into account. For instance, a city or town that relies on run-of-river water is likely to have a different level of water security than a city or town that is served by a large dam. The community's willingness to pay must also be taken into account. Putting this aside, common terminology and planning frameworks would be a great step forward.</p>  |
| <p><b>Recommendation 4</b><br/><i>Strengthen the independence of pricing and regulatory agencies in those jurisdictions that do not have independent pricing regulators.</i></p> | <p>WSAA strongly supports this recommendation given the importance of all jurisdictions charging for urban water at upper bound levels. Victorian and New South Wales have well established independent economic regulators and South Australia is committed to introducing independent economic regulation.</p>  |

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| <p><b>Recommendation 5</b><br/><i>Provide independent regulators with deterministic powers for both the level and structure of water and wastewater tariffs.</i></p>                  | <p>WSAA also strongly supports this recommendation on the basis that if you price water correctly many of the issues associated with funding new investment and managing existing assets go away. In an ideal world the price of water should be determined by an independent regulator to remove the politics of setting water tariffs. It would be interesting to compare and contrast the process for determining water prices for water utilities under economic regulation to those utilities which do not fall under the regime of an independent regulator.</p>  |
| <p><b>Recommendation 6</b><br/><i>Promote consistency of approach to regulated pricing through the widespread adoption of the NWC pricing principles.</i></p>                         | <p>WSAA supports the COAG pricing principles and notes that many of the capital city water utilities would already be complying with these principles. A mechanism should be developed to require water utilities, regardless of size, to implement these pricing principles within a short timetable.</p>  |
| <p><b>Recommendation 7</b><br/><i>Remove institutional and legislative barriers to rural-urban trade.</i></p>   | <p>WSAA strongly supports this recommendation and is aware that too often the option of trading with rural water holders is not even considered because of political difficulties. The reality is that this option is often the optimal one which allows water to flow to its highest value use and can prevent the need to invest in expensive and energy intensive alternative sources of water.</p>  |
| <p><b>Recommendation 8</b><br/><i>Develop a model for defining and implementing tradable entitlements for large urban water users and possibly water retailers.</i></p>               | <p>WSAA supports this recommendation but circumspection is required given that the large urban water users only use a relatively small percentage (generally around 30%) of total water consumed in a city or town. It makes sense that large customers who have a low aversion to water restrictions are able to buy entitlements to increase their security of supply. It should be noted that over the last decade and a half when households have experienced water restrictions, few restrictions were ever placed on the commercial and industrial sector.</p>  |
| <p><b>Recommendation 9</b><br/><i>Investigate the feasibility and effectiveness of allocating tradable entitlements to parties responsible for bulk water delivery functions.</i></p> | <p>WSAA would only support this recommendation provided that the case was made for how such a reform would improve customer outcomes. WSAA believes that a study should be undertaken to model exactly how this reform would operate and how perverse outcomes could be avoided. Caution is required in this area as we have never been able to identify a working urban water market anywhere in the world. It is paramount that the reform program is not progressed on ideological grounds but must satisfy the ultimate test that 'marginal social benefits exceed marginal social costs'.</p> <p>Market driven scarcity pricing for bulk water also requires close examination. The assumption often made when proposing scarcity pricing is that the dams will only stay low for a relatively short period of time before rainfall returns to replenish them. We now know after 15 years of climate change that this definitely is not the case. An ABARE study modelled on Canberra showed just how expensive water would become during a prolonged dry period.</p> <p>WSAA is also aware that when the electricity industry was being reformed the then Industry Commission spent 12-18 months investigating which part of the electricity industry was a natural monopoly, which part was contestable, who was going to be</p> |

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|  | <p>responsible for planning, who was going to be the supplier of last resort and how perverse outcomes could be prevented. None of this work, to the best of my knowledge, has been undertaken for the urban water industry and this work would need to proceed before any reform of the industry given that water and wastewater are vitally important community and environmental services.</p>   |
| <p><b>Recommendation 10</b><br/><i>Design and introduce state-based regimes for third party access to wastewater and to monopoly network infrastructure.</i></p>                                 | <p>WSAA supports state based third party access regimes but has a preference for these access regimes to be nationally consistent in principle so that entities that operate across Australia don't confront fundamentally different rules in each of the states and territories. WSAA also notes that such a third party access regime already exists in New South Wales and is currently being introduced in Victoria and South Australia. Apart from making the application process simpler compared to Part III A of the Trade Practices Act a third party access regime also allows rent seekers to be flushed out.</p>  |
| <p><b>Recommendation 11</b><br/><i>Payments for community services obligations (for the supply of water to country areas) should be made contestable where this is not already the case.</i></p> | <p>WSAA supports this recommendation although it needs to be noted that the urban water industry experiences many fixed costs and there are significant economies of scale in aggregation.</p> <p>While CSO arrangements could be made available for all service providers, competition should be for the provision of the service itself. The CSO payment is simply an outcome of the actual cost of the service and the associated pricing in place.</p> <p>The issue of "contestable" CSOs needs to be handled cautiously, given the number, condition and location of remote and isolated communities that require services in regional Western Australia.</p>  |
| <p><b>Recommendation 12</b><br/><i>Assess the costs and benefits of a centralised and independent institutional model for option assessment and bulk water procurement.</i></p>                  | <p>WSAA is ambivalent about this recommendation unless it can be assured that a centralised and independent procurement entity had the skills and knowledge to undertake this process. It is worth noting that large investment is lumpy in the urban water industry and what an independent entity would do between investment decisions is not clear. The risk of the independent entity is that it does not have access to customer and stakeholder views and may arrive at solutions that are unacceptable to customers and the community.</p> <p>Similar models have been debated in the UK as a means of achieving upstream competition through independent procurement and/or planning. Analysis by Ofwat<sup>1</sup> noted that an independent procurement entity was only one possible means of generating efficiencies and that a more structured analysis may yield better approaches. Significantly, the final report of the UK's Independent Review of Competition and Innovation in Water Markets by Professor Martin Cave did not proceed with the concept (although it does make other recommendations for creating competitive upstream markets involving the existing regulator, Ofwat)</p> |

<sup>1</sup> Ofwat (January 2009) Ofwat's response to the independent review of competition and innovation in water markets – Consultation response from Ofwat.

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| <p><b>Recommendation 13</b><br/> <i>Continue to critically reappraise the need for and appropriateness of permanent water restrictions.</i></p>  | <p>WSAA supports this recommendation and is very strongly of the view that ongoing harsh water restrictions are not the future vision of the Australian urban water industry. WSAA believes that water restrictions are a lever to be pulled during emergency situations and should not become part of an ongoing water efficiency program. It is understood that until the new infrastructure has been put in place that restrictions will be required.</p> <p>Local circumstances should be taken into account when determining water restriction policy. As an example, the issue of permanent sprinkler bans and water restrictions in Perth requires careful consideration. The winter sprinkler ban in Western Australia was introduced in 2009 against a backdrop of significant decline in winter rainfall, rapidly increasing population and to augment other water efficiency measures. It is unlikely in the short-term that these water efficiency controls will be eased and may in fact be extended to alternative supply systems as climate change continues to impact Western Australia.</p> <p>Generally speaking, the urban water industry is moving beyond water restrictions and has introduced water saving rules for households which represent good housekeeping.</p> |
| <p><b>Recommendation 14</b><br/> <i>Design 'opt in' arrangements for large water users that allow individual customers to decide the level of supply reliability they receive.</i></p> | <p>WSAA supports the concept of giving customers more choice and notes that this could be done within the existing institutional arrangements if state government owners allowed the water utilities to do so. There are many options for customers to pay for different products and WSAA hopes that governments will grow comfortable with giving customers choice in water products.</p> <p>Opting in or out could be problematic for an integrated public water supply system. Very large water users may wish to consider self supply options outside of the integrated scheme.</p>   |

In conclusion WSAA thanks Infrastructure Australia for commissioning and inviting comment on this report.

If you wish to follow up on any of the comments made in this submission please call me on 03 9606 0678 or via email at [ross.young@wsaa.asn.au](mailto:ross.young@wsaa.asn.au).

Yours sincerely

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