Water Services Association of Australia

Submission in response to the Productivity Commission draft report Australia's Urban Water Sector

WSAA

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Contents

The Water Services Association of Australia (WSAA) acknowledges the assistance of PricewaterhouseCoopers (PwC) and the WSAA membership in preparing this submission to the Productivity Commission's draft report *Australia's urban water sector*. The views expressed in this submission reflect those of WSAA and its membership.

All inputs to this report, including water industry data and statistics have been provided by WSAA and its members and PwC has not attempted to verify their accuracy or undertake additional primary research.

1 Introduction

Background

WSAA welcomes the opportunity to provide comment on the Productivity Commission's draft report Australia's Urban Water Sector. WSAA's comments in this supplementary submission are in addition to the industry submission already provided to the Commission, which provided broad-ranging comments and positions on the matters identified in the inquiry issues paper, released late in 2010.

The Productivity Commission's draft report is an important contribution to the debate on the future objectives and institutional structure of the water sector. It adds to other recent contributions from the National Water Commission (NWC), and in many respects presents a similar diagnosis of industry challenges and prescription for further reforms.

WSAA's response to key findings and recommendations

The urban water sector in Australia has progressed significantly from the generally smaller entities which characterised the sector 10-15 years ago. Urban water authorities were often Council-based and indistinct from other public service functions, with unclear and conflicting objectives. In the past the sector lacked commercial focus, both externally in how it managed its customer relationship and internally in the organization of service delivery functions. Pricing practices were poor, with very high water consumption and emergent sustainability concerns.

The urban water sector of today has met the demands of a rapidly growing population, delivering safe, high quality water and wastewater services. Significant improvements in operating efficiency have been achieved, and governance and institutional arrangements have been enhanced, supported by new policy frameworks and regulatory institutions.

In short, the urban water industry has a track record of delivering on reform programs and will actively embrace reform where:

- Community value is maximised
- Actual benefits accrue to customers

In other words, WSAA supports reforms where the marginal social benefits outweigh the costs. WSAA's view is that the Commission has largely struck a reasonable balance between academically driven reform ideas against pragmatic reform options. We have noted the differences in opinion and approach and we have sought clarification within this submission.

WSAA notes this strong emphasis on water supply in the reform options, however a greater proportion (55-60%) of the costs in urban water systems are actually on the wastewater side of the business.

The challenge is to build on the reform foundations already in place and to improve what is a generally well-functioning and effective industry – WSAA does not believe the urban water sector is fundamentally "broken". Critical too will be ensuring there are incentives for change for all stakeholders, and to maintaining the integrity of reform directions over time and in the face of future challenges.

In this supplementary submission, WSAA has focused on specific thematic areas, with targeted commentary on key findings and recommendations from the draft report. WSAA's submission also seeks to provide the Commission additional evidence and data to help inform the Commission's consideration of suggested reforms for its final report.

The key areas covered in this submission are: planning and investment, pricing, governance and institutional arrangements, and regulation. WSAA acknowledges the substantial interdependencies between these issues, and indeed this is one of the key findings of the Commission which WSAA very much supports – that reform needs to be considered as an interrelated package of elements, and initiatives need to be assessed in terms of their combined impact, not in isolation.

Adam Lovell
Acting Executive Director, WSAA

2 Urban water planning & investment

Recap of key messages from WSAA's original submission

- Water planning strategies should continue to develop a diverse portfolio of water supply options to mitigate climate change risks and maximise community value by contributing to cities that are more sustainable, liveable and prosperous.

- State Governments should remove "policy bans" to rural-urban water trading and to indirect potable re-use options – all water supply augmentation and demand management options should be assessed on their merits.

- Significant opportunities for efficiency gains in water planning are likely to flow from greater clarity from governments in terms of targets, standards, regulation and licensing, as compliance with these requirements is a key driver of capital and operating expenditure.

Improving water planning and investment

WSAA already has commented[1] on the Commission's analysis and findings on the observed trend towards large-scale desalination projects, and on the Commission's conclusion that much of the recent investment in supply augmentation in Australia could have been avoided or optimized through smaller-scale projects. WSAA maintains its view that the Commission's analysis in some cases does not consider the full range of circumstances relevant to various decisions to proceed with desalination projects. Some of WSAA's members intend to provide separate submissions to the Commission regarding specific projects and the Commission's reporting on them.

While WSAA does not agree with the Commission's assessment of some specific drought-response/supply augmentation projects, the Commission's draft recommendations on planning generally have reinforced core positions long-held by WSAA: that all supply/demand management options should be on the table, subject to robust and objective evaluation, of all costs and benefits, with due regard to risk and uncertainty, and for planning outcomes to be improved by better customer engagement.

WSAA supports the use of a real options or an adaptive management approach to urban water planning as applied to all possible demand, supply and pricing options. These approaches offer scope for planning to look at the performance of a portfolio of options, not just individual projects, and to more robustly account for uncertainty, risk and the value of flexibility inherent in certain strategies. WSAA's support for real options approaches is evidenced through its publication of an occasional paper on the topic in 2008.

One challenge for water utilities is regulatory and political acceptance of the planning outcomes derived from a real options approach. Real options modelling can be complex, relying on judgments on the probability and consequences of uncertain future events. Independent regulatory interrogation of planning assumptions can therefore present difficulties. Regulators also may be reluctant to allow for recovery of costs incurred in progressing options which ultimately do not proceed, notwithstanding these preparatory expenditures may have been prudent when considering all relevant factors.

Ultimately, water utilities will need to invest in educating and informing regulatory and political stakeholders on increasingly complex planning decisions.

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1 *All options to secure our urban water supply*, The Australian, 27 April 2011

A further challenge is how to effectively harness customer input to real options planning approaches. This involvement extends to both reliable customer-behaviour assumptions as inputs to real options modelling, and to the “explainability” to customers of planning scenarios derived from a real options approach.

It should also be noted that a real options approach to urban water planning can be integrated with current investment evaluation approaches, including Triple Bottom Line and incorporation of externalities. This is important in assisting the urban water industry’s ability to move towards more sustainable cities, as supported by integrated water management outcomes.

There is a tendency in the Commission’s draft report to focus predominantly on water supply from the narrow dimension of quantity and security/reliability. Non-residential customers particularly have very different circumstances, meaning that they value a range of water quality attributes differently, not just security/reliability. There are potentially large efficiency gains in developing more customer-centric service standards, moving away from whole of system/utility parameters, and coupled with customer-specific service/pricing arrangements.

Implicit in much of the Commission’s draft report is a view that competition between water utilities, ultimately, will provide the vehicle for customers to exercise choice in the service dimensions important to them. While competition may offer some opportunities for expanded customer choice, a fundamental and immediate prerequisite is for meaningful customer input at the pre-planning and planning stages of infrastructure and service delivery so as to identify future supply options which best meet diverse customer needs.

WSAA believes that models for water planning, pricing and other business decisions must be appropriately informed by customer views and input.

3 Pricing of water & wastewater services

Recap of key messages from WSAA's original submission

- Achieving full cost recovery needs to be a continued focus in both major metropolitan and regional areas. Despite widespread agreement to principles, the practical application of full cost recovery in pricing arrangements is lacking.

- Use-restrictions are acknowledged as an inefficient and blunt means of managing demand, which impose significant costs on the community.

- The effectiveness of scarcity pricing as a mechanism to manage demand and encourage new supply augmentation, as well as customer impacts and perceptions, needs further work.

- WSAA sees scope and substantial benefits from greater flexibility for water businesses in terms of moving away from highly-prescriptive regulated tariff structures.

Moving away from inclining block tariffs

Changes to water (and wastewater) pricing have been an ongoing part of the wider agenda of industry reform over the last two decades. Utility pricing practices have evolved from being an indistinct component of council rates or other State taxes, to service-based charges at the property-level, to various forms of consumption-based charging guided by various regulatory and economic pricing principles.

This evolution is important as, to assess current (and by extension future) pricing practices across the sector, it needs to be acknowledged where pricing frameworks have originated from, and the timing and practical complexities associated with the introduction of any changes.

A case in point is the Commission's findings and recommendations regarding inclining block tariffs (IBTs). The Commission found that IBTs can lead to inefficiencies and inequities, for reasons that generally have been well-explored in various regulatory and other reports.

The key issue is that the transition from IBTs to a new pricing structure introduces some potentially large customer-level distributional impacts, and experience has shown that there is substantial customer and political-inertia to rapid changes in pricing policies. Practically, therefore, moving to a more efficient and conventional two part tariff may need to be transitioned over several years (and potentially over multiple regulatory periods).

The pace of this tariff change needs to balance a range of factors: impacts on customers, their understanding and acceptance of the rationale for change, and the impact of related changes to metering, billing frequency, and cost-recovery levels overall. To this end, WSAA notes the Commission's largely unevidenced claim of "substantial" efficiency gains from moving to a flat volumetric retail pricing structure from IBTs currently. WSAA asks that the Commission explain further the source and quantum of these efficiency claims.

Flexible pricing and scarcity pricing

Water pricing issues generally have been examined in detail by various government agencies, regulators, academic researchers and indeed by water utilities themselves. The additive contribution of the Commission's draft report to this debate is mostly in relation to the concept of 'flexible pricing'.

The Commission found that a more flexible approach to bulk water pricing – analogous to the so-called scarcity pricing models – offers scope to improve the efficiency of both water resource allocation and future source augmentation decisions. WSAA notes also the recent release by the NWC of a separate report on

scarcity pricing,[2] which outlined a hierarchy of different models and discussed in more detail various practical implementation issues associated with each option.

Both reports are an important contribution to the current debate on how pricing reform may, in combination with other measures, help to improve water infrastructure planning and service delivery outcomes. One of WSAA's members, Sydney Catchment Authority, also has commissioned a consultancy report on scarcity pricing for its bulk water services, and will provide a copy of this report to the Commission when it is expected to be finalised in September 2011.

The Commission's draft report travels quickly from a discussion of what bulk water prices "need to" achieve, to a finding that these goals can be achieved using flexible pricing. Further discussion is required as to how flexible pricing would support objectives such as intertemporal allocation of water in storage and from inflows, signalling the timing and scale of future augmentation, and achieving full cost recovery. The final report could benefit from making clearer the Commission's views on the hierarchy of objectives of more flexible bulk water pricing, and explaining further how (and under what assumptions) a flexible bulk water pricing model would achieve these objectives.

The discussion to support flexible pricing generally is robust in theory, but the practical realisation of suggested benefits needs further exploration. For instance:

- exposed to a cost-recovery risk related to uncertain future inflows and extended periods of SRMC-based prices, what risk premium (over current relatively low regulatory returns) would a bulk utility require to encourage it to invest in new source augmentation?

- what scale of price increase would be required, over what time period, to meaningfully reduce demand to the point that investment in supply augmentation could be postponed?

- how certain are assumptions regarding changes in future customer water consumption behaviours, and are these assumed behavioural responses understood and acknowledged by customers?

The Commission's economic modelling of flexible pricing suggests there are efficiency benefits in both the size and timing of supply augmentation investments. In simple terms, the modelling suggests that flexible pricing could reduce water demand sufficiently during periods of drought to defer/avoid large supply augmentation investments.

Implicit in this modelling are assumptions as to how retail customers would respond to changed price signals (if the scarcity price is quarantined to the bulk sector, then WSAA is unconvinced that it could have a meaningful impact on end-user water demand, and this disconnect between bulk and retail water prices would create significant demand risk for distributor-retailers – assuming a vertically-separated industry structure).

The key assumption is that customers receive, understand and can respond to a timely scarcity pricing signal. Current billing practices and metering technologies are therefore significant practical limitations to an effective scarcity pricing approach. Changes to these arrangements need to be well considered; for instance, while a shift to monthly billing would improve the immediacy of pricing information, it also would reduce the amount of each customer's bill, meaning a change in water consumption translates to a lower dollar value impact on that bill, potentially lessening the effectiveness of the price signal in influencing demand.

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[2] National Water Commission (2011) *Efficient water resource pricing in Australia: an assessment of administered scarcity pricing in urban areas*, Waterlines Report Series No. 44, April

These assumptions are critical as they enter the economic modelling no differently than other variables, such as known production/reliability/cost parameters for desalination. Just as a risk-based approach to planning must account for uncertainty in the performance of climate-dependant source augmentation options, uncertainty as to how customers might respond to price variability, of unknown scale and duration, needs to be carefully understood.

Whether customers and other stakeholders would accept a scarcity pricing framework also is important. Customer acceptance was explicitly acknowledged by the NWC as central to realising benefits from more flexible pricing approaches. Partly for this reason, the NWC proposed various possible options to flexible pricing, including simpler models such as offering an 'unrestricted' supply option as an alternative to a traditional tariff structure.

WSAA believes that there needs to be further research on customer attitudes to more flexible pricing structures. This is broader than just updating price elasticity estimates; it goes to the core of whether customers regard water services, in all possible future circumstances, as a commodity where price is the sole determinant of consumption, or more akin to services such as public health.

- Some qualitative market research has been recently undertaken by Yarra Valley Water in relation to potential tariff options. A range of options were explored with a cross section of customers, including a form of scarcity tariff. Customers indicated a desire for greater choice (but not too much) and greater control over their bills. In terms of scarcity pricing the result was polarized, although overall there appears to be a leaning towards restrictions and water efficiency over pricing solutions to achieve a supply demand balance. More details on this customer research are contained in Yarra Valley Water's separate submission to the Commission.

- The Australian Water Association's 2010 report on *Attitudes to water in the Australian community* similarly found little support for scarcity pricing, with a strategy of temporary price increases during periods of scarcity being opposed by almost the same proportion of respondents as the alternative of a permanent increase in water prices. The large majority of respondents preferred end-use restrictions and more efficient water using appliances to pricing approaches to managing water demand.

Fundamentally, there is uncertainty as to how a scarcity pricing approach, in whatever form, would work at the customer level and how it would be perceived by the community. For this reason, WSAA remains cautious as to the merits of wide-scale application of flexible pricing approaches.

WSAA is particularly cognisant of the significant practical challenges to introducing flexible pricing, including: constraints on water utility physical networks, systems and capabilities, the challenge of integrating billing systems with supply behaviour and customer responsiveness, and the effect of new climate independent supply in some areas.

WSAA does acknowledge the potentially large pay-off from a more efficient and practicable approach to bulk (and retail) water pricing, particularly in an environment where utilities shift away from reliance on restrictions, which WSAA supports. What is needed is the right model to build from, which can demonstrate practically the benefits and opportunities.

In the energy sector, for instance, flexible pricing approaches evolved over an extended period, and their direct application remains contained to only a sub-set of the retail customer base (notwithstanding the participation of retail energy suppliers in the generation market which is characterized by highly-flexible energy prices).

WSAA believes there are potentially important lessons for the water sector in experiences of other sectors, such as energy. Options which 'prove up' the concept of scarcity pricing in a low cost and low risk way, and illustrate the key success factors for flexible pricing without relying on economic modelling, are needed prior to any widespread implementation of flexible pricing. A pilot or similar scarcity pricing demonstration project,

focusing on a particular subset of customers or defined supply area, would be critical before moving to introduce a new pricing framework across the sector which would be without precedent anywhere else in the world.

Perhaps fortuitously, because of the recent large investments in supply augmentation, the water industry does have a window of opportunity to investigate, define and implement change, outside of the constraints of water restrictions and supply security concerns. Although in a practical sense, this will also limit the ability of the industry to fully test the costs and benefits of the approach – there will be a limited need for a price to signal a supply need or constrain demand.

Water businesses, governments and regulators also should consider other ways in which 'flexible' pricing might be achieved. Flexibility should not be limited to the relationship between price and supply security, but should cover the full spectrum of quality and service attributes inherent in water and wastewater services. Allowing and supporting utilities to negotiate with their customers and offer differentiated water and wastewater products, better suited to different customers needs and individual circumstances, offers perhaps even more scope for efficiency gains than would security-related pricing flexibility alone.

Consumption-based pricing

At the retail level, WSAA strongly supports the Commission's call for pricing to reflect the efficient cost of providing services, and for more widespread consumption-based pricing, subject to the limitations of the cost-effectiveness of retrofitting separate meters for each premises where water consumption is currently measured communally.

This last point will remain a challenge for some metropolitan areas (such as Sydney) where there are significant established stocks of high-density residential accommodation apartments without separate metering, and where retrofitting existing meters is very unlikely to be able to be cost-effective. There also are challenges in those jurisdictions (such as Queensland) where tenant billing frameworks are still to be developed.

Although consumption-based pricing is now commonplace in major metropolitan areas, there are still utilities which do not have even the basic tenets of consumption-based charging. We refer you to WSAA's initial submission which provided details on Townsville City Council's recent decision to revert to an allowance-based approach to water charging, for instance. The situation in Townsville remains unchanged and this is of concern to both regional water utilities and the broader urban water industry. The example in Townsville shows the result of unclear demarcation of tariff setting with multiple agencies involved. The outcome is that the relevant water utility is in a difficult position to collect revenue based on cost reflective pricing and to operate and invest in the water system sustainably. The Commission should not lose sight of the potential efficiency improvements from implementing even modest consumption-based tariff reforms, where these are currently absent altogether.

Postage-stamp pricing

The Commission was critical of the current 'postage stamp' approach to pricing operated by most urban water utilities. The draft report identified scope for efficiency gains in moving to more location-specific pricing. The draft report was, however, less clear about the spatial level at which the Commission envisaged uniform pricing should be unwound, for example; whole of State/Territory, whole of region, across a single utility's service area, or to specific sub-systems within an overall network?

Every utility pricing system involves compromise and some level of divergence between price and cost at an individual level. As a common network service, it is impractical to isolate for each individual customer the exact share of network costs related to service delivery. Inevitably, some averaging and subjective cost allocation assumptions are required.

Institutional arrangements in many jurisdictions have resulted in various degrees of locationally-differentiated pricing, for example, metropolitan Melbourne has three distributor-retailer businesses, each with similar tariff structures but different prices. Further, a number of water utilities have considered (and some have adopted) forms of locationally-differentiated pricing (ie, non-postage stamp) within their own supply area.

As with all reforms, the costs of moving to a more complex pricing approach need to be balanced against expected benefits. In its draft report, the Productivity Commission's suggested that equity and distributional considerations were the main reasons argued for retaining postage stamp pricing. While equity and fairness is important, WSAA believes there are other factors that also should be considered:

- The extent to which cost differentials can reliably be determined, and how to account for changes in costs over time. In complex networks, the physical location of assets is not necessarily indicative of the beneficiaries of these works.

  In north Queensland, more than $30 million has been spent on sewerage infrastructure on Magnetic Island over the past few years, for the benefit of approximately 2,200 permanent residents and seasonal tourist population visiting the island. A significant contributor to these costs was the environmental requirements of the Great Barrier Reef Marine Park. Although treatment costs on Magnetic Island are locationally higher, basing prices on these higher costs would be inappropriate as the beneficiaries are broader than just local residents and businesses.

  In Victoria, the decision to proceed with desalination east of Melbourne was based on whole of region supply security objectives. The water physically produced by the desalination plant will in most circumstances be consumed directly by businesses and households on the eastern areas of Melbourne, yet the beneficiaries of this project – in terms of overall supply security for the region - are all consumers across the greater metropolitan area.

- Whether locationally-differentiated pricing will meaningfully affect decisions on where to locate water-using activities (either residential or non-residential), particularly where the underlying cost difference is in the fixed network cost and therefore would not affect an efficiently-set volumetric charge.

  Decisions on where to locate industry are broader than simply underlying utility costs (water and other services), and there are many examples of where Council and State planning requirements locate industry in defined areas, even though the cost of water/wastewater infrastructure to these sites may be higher. In these cases, postage stamp pricing may have some distributional or equity impacts, but the efficiency motivation is lessened. Any movement away from postage stamp pricing must consider the attitudes of the community.

  In 2010 Sydney Water conducted research on attitudes to various approaches to pricing. In qualitative testing Sydney Water's customers expressed a strong preference for water prices to be the same across its area of operations.

- The previous existence of developer charges also has implications for moving to more location specific water and wastewater prices. In high cost areas the gap between current revenues from postage stamp prices and costs, may also be at least partly offset by the previous developer charges in those areas.

  The interrelationship between recurrent (postage stamp) charges and locationally-differentiated developer or infrastructure charges is important. If the objective of a locationally differentiated tariff is to influence spatial patterns of development (encourage development in lower-cost network areas), then up-front developer charges may be a more effective mechanism. There are equity advantages too in that the immediate incidence of the charge is on developers, whom have at least

some capacity to manage the scale of the charge through the way in which the development is located and designed.

The Commission's final report could usefully explore this issue further.

- Transparency of system costs is necessary to facilitate any third party access pricing arrangements for water supply systems. The nature of these arrangements may be a driver of both change from postage stamp pricing, and be relevant to defining the structure of any geographic tariff differentiation.

  The Commission's final report also could consider and discuss the relevance of third party access frameworks in place or proposed, such as those in NSW and metropolitan Victoria.

- Postage stamp pricing has been crucial to the success of the regionalisation and commercialisation of regional water businesses in smaller communities. Cross subsidising many regional water schemes has helped deliver significant improvements in the level of service. The Commission should recognise the impact of any postage stamp pricing reform on smaller communities.

Locationally-differentiated charges are likely to be most relevant in very large networks where there are demonstrable spatial differences in supply costs, able to be calculated robustly, and where other network and customer characteristics mean that the benefits of a more complex (and costly) pricing system are sufficient to outweigh the costs. Examples such as the Gladstone Area Water Board demonstrate that, where these conditions are present, a locationally-differentiated tariff can be successfully adopted.

WSAA does acknowledge that, where utilities are expanding service areas geographically, there is an opportunity to assess whether or not a differentiated or uniform pricing framework should be applied.

Indeed, the issues are broader than just pricing, and extend to determining the appropriate customer and network standards of service, as there can be a regulatory tendency to apply the utility's pre-existing levels of service to new areas, without proper assessment of relative costs and benefits.

For instance, Hunter Water recently took on water and wastewater service delivery responsibilities for the Dungog area in the lower Hunter Valley of NSW. . IPART determined that Hunter Water's Operating Licence obligations for levels of service would apply after a period of transition to this new supply area, though importantly did acknowledge the higher cost of meeting these standards in allowing Hunter Water to levy a differentiate (higher) charge for this new area.

Balancing equity and cost-reflectivity objectives in Western Australia

The charging policy in Western Australia provides another option where postage stamp pricing and cost reflective pricing co-exist. Residential customers pay uniform charges across the State for consumption up to 300kL per annum. Consumption above this level is progressively more expensive, based on scheme costs. This compromise allows for a balance between equity and cost reflectivity, where a cost reflective tariff for all consumption would be unacceptable.

For non residential customers, access to the scheme is postage stamp (headworks contribution and annual service charges are uniform across the State), but the volumetric charge is cost reflective for all consumption, subject to a maximum charge.

A significant feature is that for major customers, those using more than 50kL per day, individual agreements apply with specific location-based cost reflective charges applying, including capacity charges based on the cost of augmenting capacity at the customer's location.

The Water Corporation believes that this arrangement allows the most price sensitive customers (major consumers with options for process, source and location alternatives) to receive a cost

reflective price. Other customers, whom would not make location decisions based on water prices, have equitable access to the scheme, and that business consumption and part of residential consumption is at cost reflective prices. The Commission should consider whether the additional benefits from moving from this version of postage stamp pricing would be substantial.

4 Governance & institutional arrangements

Recap of key messages from WSAA's original submission

- Structural reform should proceed only where it delivers superior outcomes for customers and the environment, and a stronger evidence base is needed to support structural separation simply as a means of encouraging contestability.
- A 'one size fits all' approach is not appropriate. The reform directions for large vertically-integrated urban utilities will differ from reforms required in regional areas.
- Many of the reforms generally accepted for the major metropolitan areas – including commercially-autonomous management of businesses – are absent in some regional areas, which has contributed to poor service and business-outcomes.
- Planning frameworks need to make clear who ultimately is responsible for the planning of water and wastewater systems, to ensure accountability for decisions.
- Community and stakeholder consultation during the formulation of water planning strategies is critical.

Creating an effective governance model

The Commission has called for further improvements in governance arrangements between Governments and water utilities, with greater clarity as to roles, responsibilities and accountabilities. WSAA strongly supports this draft recommendation (draft recommendation 11.3), reinforcing the directions proposed by WSAA in its initial submission.

Where there are conflicting and inconsistent objectives set for water utilities, these should be clarified and appropriately re-specified. WSAA acknowledges the demarcation between the responsibilities of all parties for water security is a particular area for improvement. On this, there are important questions to be resolved in terms of how water security objectives would be specified and periodically revisited, including the appropriate role for customer input to these processes.

The main challenge, in WSAA's view, is how practically to ensure that the Commission's proposed governance reforms are implemented effectively and all parties continue to respect over time the integrity of the arrangements. A clear roadmap is needed to guide future governance and institutional reforms.

Looking to the corporatisation and commercialisation frameworks of the various State and Territory Governments, these are largely consistent with the principles set out by the Commission in its draft recommendations. There also has been long-held agreement to the principle of separating Government's role as policy-maker and regulator from that of commercial services delivery. The enabling legislation for State-owned Corporations in NSW, for instance, has been in place for more than 20 years, and is grounded in similar principles. Similar legislative frameworks are evidenced in other jurisdictions, also. What is lacking is the robustness of these arrangements to ongoing political interference, particularly during periods of crisis.

Government intervention in water pricing in south east Queensland

On 1 July 2010 three new "distributor-retailer authorities" were established in south east Queensland, formed from the water and wastewater businesses of ten local councils. The new authorities were established under special-purpose legislation and constituted with independent Boards of Directors. Under Participation Agreements with relevant Councils, the authorities were

given a mandate to operate commercially, within an interim price-monitoring framework administered by the Queensland Competition Authority (QCA).

The three authorities announced large price increases to apply from 1 July 2010. The price increases were needed to cover increasing costs of bulk water – purchased from State-owned bulk water authorities –the businesses' own operating costs and large capital programs, and to meet financing obligations to lenders and Councils as "equity" participants.

During 2010/11 the QCA undertook a detailed investigation of each business' pricing policies and cost recovery. The QCA found that the businesses were recovering just on or below – for one business substantially so – the "maximum allowable revenue", including regulator-determined efficiency adjustments for both capital and operating costs.

Price increases were nonetheless a source of significant community concern. A long-running dispute between the State Government and Councils as to the factors contributing to the price increases, largely played out in the media, resulted in the State legislating to cap increases in water and wastewater prices to CPI on the distributor-retailer's component of service costs, plus the actual cost of bulk water (for which the State retained an above-CPI price path).

The State's intervention essentially undermined the autonomy of the independent Boards appointed to provide strategic oversight of the three businesses. The price cap means that revenue growth for some businesses will be insufficient to meet borrowing covenants, necessitating a renegotiation of loan terms, and has created a further layer of uncertainty for the new businesses' management teams as they grapple with the challenge of integrating legacy business systems, organizational structures, policies and standards, capital plans and operating strategies.

The State's intervention further undermined the importance and integrity of independent price regulation as a means of protecting customer interests, while facilitating the financial sustainability of the businesses.

While strongly supporting the proposed improvements in governance arrangements identified by the Commission (draft recommendation 11.3), WSAA would ask that the Commission give further consideration to the questions of, firstly, how to encourage Governments to adopt appropriate governance models where these are not already in place in any reasonable form, and secondly, how might the integrity of these arrangements be preserved over time.

Part of the difficulty in achieving/maintaining a commitment to reform is a continuing uncertainty as to what objective this reform is intended to achieve. The reform blueprint needs to tell a story as to why reform is necessary – to convince stakeholders that they should agree to and remain committed to reform – as much as explaining what that reform will actually entail, to manage expectations about what can be achieved in the short to medium-term.

A related issue seems to be the absence of any clear penalties or sanctions for States where they step away from prior reform commitments.

Assessing the case for further structural reform

Structurally, the Commission has observed that there are quite different models in existence across the major metropolitan and urban areas. Broadly, structural reform has resulted in the aggregation of previously large numbers of small water businesses, sometimes in combination with the creation of utilities with specific vertical responsibilities in the supply chain (eg, bulk supply) and with some horizontal segregation (eg, three separate distributor-retailer corporations in metropolitan Melbourne).

WSAA maintains its view that there is no "one size" structural model suitable for water sector nationally. Geographic and physical network characteristics, the composition and density of the customer base, future supply augmentation options, and overall scale are all relevant factors which need to be considered in assessing the appropriate industry structure. Any changes to industry structure need to be based on a clearly articulated business case, which assesses the costs and benefits of change compared to the incumbent structure.

The Commission's proposed Option 5, entails vertical and horizontal separation across the supply chain, principally for the purpose of creating entities which could compete with each other. WSAA agrees that this is a high risk approach and is unlikely to be justified on cost-benefit grounds.

As to whether the Commission's more preferred structural models – Options 2, 3 and 4 from the draft report – are appropriate, the critical question to be addressed is whether some level of competition is feasible, and whether it can deliver outcomes superior to the incumbent structural models and of course whether the benefits outweigh the costs.

WSAA does agree that, periodically, structural arrangements should be retested, with a view to identifying options that would support both improved business performance and customer outcomes. To a large extent, this is indeed what is happening; for instance, the distributor-retailer model in Victoria was recently reviewed by the Victorian Competition and Efficiency Commission (VCEC), after being in place and largely unchanged for a decade. The VCEC review supported the status quo. The recent creation of the Central Coast Water Corporation in NSW, separating the water and wastewater functions of Gosford and Wyong Councils, is a further example of reform, following an extended period of review and reassessment of the former structural arrangements.

Future structural reform of the two major vertically-integrated metropolitan water utilities – SA Water and Water Corporation – is primarily a matter for the relevant State Governments and those utilities. Such a review should consider alternative structural options as to which best meet the objectives for the urban water sector.

(On this point, WSAA notes that both the Commission and NWC have attempted to define an objective statement for the water sector. While there are similarities between the two, WSAA prefers the NWC's single national statement of objectives.)

WSAA strongly supports the Commission's draft recommendations regarding the reinvigoration of reform of water supply arrangements in regional areas. Draft recommendation 13.2, in particular, has merit for NSW, given the recent change in Government, and for Queensland, given the retrograde announcements of the State Government in relation to urban water pricing in south east Queensland.

5 Enhancing the role of regulation

Recap of key messages from WSAA's original submission

- Independent economic regulation has been effective in removing political interference in water pricing decisions, and should continue (but with some important changes).
- National consistency is necessary, and options to achieve this could include agreement on more definitive nationally-consistent regulatory principles.
- Streamlined environmental, public health and economic regulation frameworks are needed to remove areas of regulatory duplication between the Commonwealth and States and Territories.
- Independent economic regulation should be extended to capture water pricing outside of the major metropolitan centres, but applied in a way that is mindful of the particular institutional arrangements and capacity of utilities in those areas.
- Overly prescriptive price regulation can however impact on desirable flexibility in utility/customer service arrangements. In metropolitan areas regulatory focus should be on overall cost-recovery levels for key services, rather than determining each individual tariff component.
- A corporatisation approach should, for the larger urban utilities, be the base case governance model. Lesser models (commercialisation, etc) have proven to be ineffective and in the main corporatised businesses have outperformed utilities embedded within local governments.

Proposed directions for economic regulation

A theme underlying much of the Commission's draft report is that, with appropriate governance and institutional reform, much of the current level of Government involvement in planning and regulation would be redundant.

The reality is that two decades of governance reform, largely in the direction suggested by the Commission, has not yet delivered an institutional model which is immune from undue political involvement. Nor has it created sufficient internal incentives for utilities to drive towards full cost recovery – the role of independent economic regulators in facilitating the move to full cost recovery are underplayed in the Commission's analysis.

WSAA agrees that current regulatory arrangements are too costly, require too much time and information, and involve the regulator in the detail of business operations and customer interaction beyond that needed to achieve the core objective of protecting customers from the misuse of market power. WSAA's original submission sought for all regulatory frameworks – economic, public health, environmental – to accord with core principles of good regulatory practice – but was clear too in seeing a continued role for economic regulation in the water sector.

The Commission's draft report explicitly dismisses the role of economic regulators in "pulling" businesses towards full cost recovery outcomes. The draft report suggests that Governments can "… simply instruct [businesses] to price in a manner which generates adequate revenues …" , relying only on external monitoring of the business' compliance with this direction. The draft report suggests that economic regulatory arrangements be wound back to a more light-handed monitoring model, perhaps modelled on the current airports price monitoring arrangements.

Experience suggests that this ideal arrangement simply is unlikely to be effective, certainly not as a model for the entire sector. Looking across the urban water sector nationally, WSAA's observation is that where independent economic regulation is in place, generally there are better outcomes achieved in terms of cost recovery, and more appropriate and efficient operations, investment and pricing practices. For instance, a common driver for superior outcomes in WSAA's rolling program of international process benchmarking projects, spanning Mechanical and Civil Maintenance, Asset Management and Customer Services, was the presence of an economic regulator. Although economic regulation tends to be applied in conjunction with 'better' institutional and governance models, WSAA's research does suggest that the presence of third party oversight did create an environment of accountability for performance.

Whether it is inconsistent with a traditional view of the role of an economic regulator, the fact is that regulation has been a key part of achieving more appropriate cost recovery outcomes in the water sector. Independent regulation has helped engender rigour in regulated businesses' assessments of customer's willingness to pay for improved service standards, and also provided transparency and credibility to investment and operating plans.

In WSAA's view, to pull back too far on the role for economic regulation would be misguided. Current regulatory arrangements are too costly, but there are ways to address these concerns.

WSAA's suggestion is for a two-tiered approach, as described below.

For the major metropolitan areas, where utilities are more commercially mature and where there are (more) robust governance arrangements in place, then a move towards less prescriptive and more light-handed regulatory processes is appropriate. Subject to having in place improved corporatisation and governance arrangements, regulators should step back from setting individual prices, and provide more flexibility to businesses to deal directly with their customers and devise and implement innovative services and pricing arrangements; in short, businesses should be free to set prices, within only an overarching regulatory constraint on cost recovery. WSAA's view is that the regulatory pendulum has swung too far towards intrusive and data-intensive regulatory processes, where costs are very likely to outweigh benefits to customers.

Overly prescriptive regulation in the urban water sector

WSAA's initial submission highlighted the case of Sydney Water, where the format of the Independent Pricing and Regulatory Tribunal's (IPART) price determination leaves little scope for Sydney Water to negotiate with its larger commercial/industrial customers, or indeed develop more tailored pricing for certain groups of residential customers.

In addition to Hunter Water's core water, wastewater and stormwater charges, IPART sets 66 miscellaneous fees, including charges for conveyancing certificates, standpipe rental/access, special meter reads, applications to connect to water supply and payment dishonour fees.

Setting prices for each tariff component for every service does provides certainty, but diminishes the scope for pricing innovation and flexibility which could benefit both the business and its customers. While it is reasonable that only the small number of customers that use these miscellaneous services should meet the cost of them, it is does not necessarily follow that a regulator should directly set the fees for these services.

In south east Queensland, the Commission's draft report proposed a continuation of the current prices monitoring arrangements. While WSAA agrees in principle with this finding, the Commission should be aware that the current interim prices monitoring framework has many, if not all, of the costs typically associated with full 'determininstic' prices regulation.

If prices monitoring is to be retained for south east Queensland, the approach should be revisited to be less-costly to businesses, whilst still retaining the core element of providing assurance to customers on overall cost-recovery levels.

The importance of good design and implementation

Sydney Water levied developer charges for water, wastewater and stormwater services until the NSW Government abolished them on 17 December 2008. The charges were set in accordance with a formula specified by the Independent Pricing and Regulatory Tribunal (IPART).

IPART reviewed its developer charges methodology in late 2007. While Sydney Water did not oppose location specific price signals, IPART's formula meant the actual charges often did not reflect the forward-looking cost of serving growth, and were burdensome to implement. This was a result of the focusing on the pricing of very old assets and an attempt to reconcile the charges with postage stamp pricing. The Sydney example highlights the critical importance of good design and implementation, so that sound pricing objectives are not undermined through the actual process of application.

Outside of the major metropolitan areas, and where economic regulation is not currently in place, WSAA believes it should be. Regulatory models obviously need to be mindful of the particular institutional circumstances in these non-metropolitan areas, and lesser-cost, less frequent regulatory reviews would be appropriate.

This approach offers scope to be a very cost-effective mechanism to drive financial improvements at the business level, supported by the introduction of enhanced governance arrangements, whilst giving customers confidence in the appropriateness of cost recovery and pricing arrangements. Though it may be different to the situation in other regulated sectors, this last point has been a critical part of stakeholder acceptance of price increases in the water sector.

Economic regulators should periodically review the relevancy of their measures to ensure that the performance monitoring regime is kept up to date. We note that Ofwat, the economic regulator of the water industry in the United Kingdom, has a 'Service Incentive Mechanism' that, in part, measures customer satisfaction.

Health regulation

As the protection of public health, primarily through the provision of safe drinking water, is a core objective for any urban water utility, WSAA understands and agrees with the intent of draft recommendation 13.5. However, some further details need to be addressed before actions arising from this recommendation can be effectively implemented.

WSAA is unclear what is intended by mandatory compliance for all elements, or health critical elements, of the Australian Drinking Water Guidelines, which has been stated in various combinations in the recommendations. At face value compliance with all elements of the ADWG is extremely onerous. This would effectively revert to a complex and costly United States Environmental Protection Agency-type system where the compliance focus is on the water sent out in distribution systems, rather than a risk prevention approach that has been successfully implemented across many jurisdictions in Australia.

The emphasis should be on compliance with the Framework for Water Quality Management, first enacted through legislation in Victoria, which ensures that all the processes are in place to prevent risks in drinking water (and recycled water). This then allows for local health regulators to work with site-specific constraints on the compliance with guidelines values for various parameters, as long as the compliance list is robustly and transparently agreed with the local community. A good example of this is in Western Australia where the state health department has worked with the community and Water Corporation in areas of high nitrate, to supply alternate drinking water supplies to susceptible populations, in this case babies and infants. Simply creating a short list of specific parameters that are regularly analysed and reported, and more importantly are relatively easy to comply with, should be avoided. The basic principle is this: each water

supply system should be assessed for site-specific risks and risk management plans put in place to avoid any parameters (microbiological or chemical) from presenting a risk to human health.

The critical recommendation is that water utilities including their directors and councillors must ensure compliance with the Framework for Water Quality Management within the ADWG. Aside from meeting critical microbiological (including turbidity and disinfection control) guideline values, health regulators must identify and engage with local communities on the specific parameters that must be reported according to site specific risks. Tools such as the Water Treatment Alliance, Aquality and Requality already exist to assist utilities meet compliance targets. These will be an excellent first steps in addressing potential health risks from drinking water across the country.

Environmental regulation

WSAA agrees with the recommendations associated with environmental regulation included in the Commission's report, particularly draft recommendation 11.6. We would refer the Commission to the NWC regarding the information request on unnecessary burdens. WSAA has contributed to a project undertaken by the NWC on efficient and effective national water quality regulation. WSAA's general view is that there is scope for harmonisation of regulatory approaches across jurisdictions to create more efficient and effective processes and at least initially reduce compliance costs where possible.

6 Concluding comments

Key responses to draft report findings and recommendations

- The challenge for policy-makers is to build on the reform foundations already in place, and to improve what is a generally well-functioning and effective industry. WSAA does not believe that the urban water sector is fundamentally "broken".

- WSAA broadly supports the Commission's draft recommendations on water planning, and particularly that all supply augmentation and demand management options should be on the table, subject to robust and objective evaluation, with planning decisions guided by an objective assessment of costs and benefits and with due consideration to risk and uncertainty.

- Models for water planning, pricing and other business decisions need to be appropriately informed by customer views and input.

- Further tariff reform offers scope for efficiency improvements and fairness between customers, but the pace of change needs to balance a range of factors, including customers' understanding acceptance of the rationale for change and the capacity of supporting processes and systems (such as billing and metering coverage).

- WSAA acknowledges the potentially large pay-offs from more efficient pricing approaches, particularly in an environment where utilities shift away from reliance on end-use restrictions, but WSAA remains cautious as to the merits of wide-scale application of flexible pricing. More work is needed on customer attitudes and likely responses to scarcity pricing approaches.

- Options such as pilot testing of particular flexible pricing approaches, which substantiate the concept in a low cost and low risk way, are needed, in preference to introducing a new pricing framework across the sector which is without precedent anywhere else in the world.

- In some areas, particularly outside of the major metropolitan centres, there are significant gaps in water pricing "fundamentals" – comprehensive water metering, charging based on consumption, and recovery of the full costs of water and wastewater services. While sophisticated pricing reforms in metropolitan areas, such as moving away from postage-stamp charging, may in some particular areas offer scope for efficiency gains, so to would getting the basics right in regional areas.

- WSAA strongly supports the proposed enhancements to governance arrangements, including greater clarity as to roles, responsibilities and accountabilities. The challenge is how to ensure that the proposed reforms are implemented effectively, and the integrity of the arrangements is respected over time.

- A clear roadmap is needed to guide future governance and institutional reforms. Part of the difficulty in achieving and maintaining a commitment to reform is a continuing uncertainty as to what objective this reform is intended to achieve. The reform blueprint needs to tell a story as to why reform is necessary. Stakeholders must be convinced that they should agree to and remain committed to reform – as much as explaining what that reform will actually entail, to manage expectations about what can be achieved in the short- to medium-term.

- WSAA maintains that there is no "one size fits all" structural model for the water sector nationally. Any changes to industry structure need to be based on a clearly articulated business case, which assesses the costs and benefits of change compared to the incumbent structure. The Commission's suggested Option 5 approach, with horizontal and vertical separation across the supply chain, is a high-risk approach and is unlikely to be justified on cost-benefit grounds.

- WSAA strongly supports the Commission's draft recommendations regarding the reinvigoration of reform in water supply arrangements in regional areas, including in NSW and Queensland.

- WSAA agrees with the Commission that current regulatory arrangements are too costly, require too much time and information, and involve the regulator in the detail of business operations and customer interaction beyond that needed to achieve the core objective of protecting customers from the misuse of market power. However, WSAA believes that there is a continuing role for independent economic regulation, guided by nationally-consistent principles, to depoliticise the water pricing debate and to facilitate more appropriate cost-recovery outcomes.

- Regulation should move towards a more light-handed approach in the major metropolitan areas, subject to having improved corporatisation and governance arrangements in place and working. Outside of the major metropolitan areas, and where economic regulation is not currently in place, WSAA believes it should be. Regulatory models should be fit-for-purpose in these areas, with lesser-cost and less-frequent reviews.

- WSAA strongly supports a continued focus by urban water utilities on public health outcomes. WSAA agrees with the intent of the Commission's draft recommendation 13.5, though is unclear what is intended by mandatory compliance with all elements, or all health-critical elements, of the Australian Drinking Water Guidelines.

- WSAA agrees with the recommendations associated with environmental regulation included in the Commission's report, particularly draft recommendation 11.6.